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REGENTS'
ANNUAL
REPORT

Fourteenth Annual Register

Nevada
State University

Reno, Nevada

1901

Printed at the
State Printing Office
Carson City, Nevada

ANDREW MAUTE
Superintendent of State Printing
1902



FOURTEENTH ANNUAL REGISTER

OF THE

NEVADA

STATE UNIVERSITY

FOR THE YEAR 1901

WITH

*ANNOUNCEMENTS FOR THE
ACADEMIC YEAR OF 1902-1903*



CARSON CITY, NEVADA

STATE PRINTING OFFICE : : ANDREW MAUTE, SUPERINTENDENT

1902



ANNUAL REGISTER.

OFFICE OF THE BOARD OF REGENTS,
OF THE STATE UNIVERSITY,
RENO, NEVADA, January 3, 1902. }

To His Excellency REINHOLD SADLER, Governor of the State of Nevada:

SIR: The Regents of the State University have the honor to submit herewith the Annual Register of the University for the year 1901, containing the courses of study, general information, the membership of the Faculty, and the enrollment of the students, as required by the Act of the Legislature approved March 6, 1901.

By the Board of Regents:

GEO. H. TAYLOR, Secretary.

J. N. EVANS, President.

UNIVERSITY CALENDAR.

1902.

SECOND SEMESTER, 1901-02.

January 7 Tuesday Second semester begins.
February 22 Saturday Washington's Birthday.
March 27-31 Thursday-Monday Easter recess.

COMMENCEMENT SEASON.

May 26-29 Monday-Thursday Final examinations.
May 30 Friday Observance of National Memorial Day.
May 31 Saturday Alumni Day.
June 1 Sunday Baccalaureate Sunday.
June 2 Monday Senior Day.
June 3 Tuesday Thesis Day.
June 4 Wednesday UNIVERSITY COMMENCEMENT.

SUMMER VACATION.

June 5 Thursday Summer vacation begins.
August 31 Sunday Summer vacation ends.

FIRST SEMESTER, 1902-03.

September 1-3 Monday-Wednesday Examinations for admission.
September 1-3 Monday-Wednesday Re-examinations to remove conditions.
September 4-6 Thursday-Saturday Matriculation and registration of students.
September 7 Sunday University convocation at 3 p. m. in Gymnasium.
September 8 Monday Recitations and lectures begin.
September 27 Thursday Thanksgiving Day.
December 19 Friday, 4:30 p. m. First semester ends.

CHRISTMAS VACATION.

December 20 Saturday Christmas vacation begins.
1903.
January 5 Monday Christmas vacation ends.

SECOND SEMESTER, 1902-03.

January 6-8 Tuesday-Thursday Examinations for admission.
January 6-8 Tuesday-Thursday Re-examinations to remove conditions.
January 9-10 Friday-Saturday Matriculation and registration of students.
January 11 Sunday University convocation at 3 p. m. in Gymnasium.
January 12 Monday Recitations and lectures begin.
February 22 Sunday Washington's Birthday.
April 9-13 Thursday-Monday Easter recess.
June 3 Wednesday COMMENCEMENT.

NOTE: Students who apply for matriculation or registration on other days than those named in the calendar will be charged a fee of one dollar.

OFFICIAL ORGANIZATION.

THE REGENTS OF THE UNIVERSITY.

The Hon. J. N. EVANS (1901-1905)-----	Reno
The Hon. W. E. F. DEAL (1899-1903)-----	Virginia City
The Hon. W. W. BOOHER (1901-1903)-----	Elko

OFFICERS OF THE BOARD OF REGENTS.

The Hon. J. N. EVANS, President-----	Reno
Mr. GEORGE H. TAYLOR, Secretary-----	Reno

THE HONORARY BOARD OF VISITORS.

The Hon. W. A. MASSEY, Chairman	Carson City, Ormsby County
The Hon. J. W. FREEMAN	Stillwater, Churchill County
The Hon. D. W. VIRGIN	Genoa, Douglas County
The Hon. E. S. FARRINGTON	Elko, Elko County
The Hon. E. J. HENLEY	Hawthorne, Esmeralda County
The Hon. MOSES REINHAET	Winnemucca, Humboldt County
The Hon. W. C. GAYHART	Austin, Lander County
The Hon. A. S. THOMPSON	Pioche, Lincoln County
The Hon. J. E. GIGNOUX	Dayton, Lyon County
The Hon. ANDREW MAUTE	Carson City, for Nye County
The Hon. J. D. TORREYSON	Carson City, Ormsby County
The Hon. M. R. AVERILL	Virginia City, Storey County
The Hon. T. V. JULIEN	Reno, Washoe County
The Hon. SOL HILE	Ely, White Pine County
The Hon. BERT L. SMITH	Eureka, Eureka County

ASSOCIATION OF UNIVERSITY ALUMNI.

President.....	PETER FRANDSEN, '95
Vice-President.....	MAUD WHEELER, '96
Secretary.....	GRACE V. WARD, '95
Treasurer.....	E. E. CAINE, '93

EXECUTIVE COMMITTEE.

PETER FRANDSEN, '95,	E. E. CAINE, '93,
MAUDE WHEELER, '96,	GEO. A. LEAVITT, '00,
GRACE V. WARD, '95,	FRANK NORCROSS, '91.

COMMITTEE OF COÖPERATION.

JAY H. CLEMONS, '96,	FRANK H. NORCROSS, '91,
ALBERT W. CAHLAN, '96,	EDWIN E. CAINE, '93,
HARRY H. DEXTER, '99.	

ASSOCIATION OF NORMAL ALUMNÆ.

President	Miss HELENA JOY, '90
Vice-Presidents	President of each class
Secretary	Miss JOSEPHINE BLUM, '94
Corresponding Secretary	Miss LILLIAN DOUGLAS, '97
Treasurer.....	Miss STELLA WEBSTER, '93

Executive Committee—Miss FRANCES FREY, '90, Mrs. FRANK NORCROSS, '90, Mrs. HENRY THURTELL, '90, Mrs. ALBERT CAHLAN, '96, Miss MARGARET HENRY, '01.

MILITARY ESTABLISHMENT.

COMMANDANT OF CADETS:

Captain HOLLIS CHENERY CLARK, U. S. Army.

Relative Rank.	FIELD AND STAFF.	Appointed, 1901.
1.. Cadet Major.....	B. C. LEADBETTER	Sept. 2
--- Cadet First Lieutenant and Quartermaster	Vacancy	
--- Cadet Second Lieutenant and Adjutant	Vacancy	
--- Cadet Sergeant-Major	Vacancy	
10.. Cadet Quartermaster-Sergeant.....	E. J. ERICKSON	Sept. 2
11.. Cadet Color-Sergeant.....	J. O. McELROY	Sept. 2

INFANTRY BATTALION.

Company A.

3.. Cadet Captain.....	G. E. ANDERSON	Nov. 25
6.. Cadet First Lieutenant.....	J. S. MAYHUGH, JR.	Nov. 25
8.. Cadet Second Lieutenant.....	BLAINE GREY	Sept. 27
13.. Cadet First Sergeant.....	ROBERT HESSON	Sept. 26

Company B.

2.. Cadet Captain.....	BRAINEED SMITH	Sept. 2
4.. Cadet First Lieutenant.....	SEYMOUR CASE	Sept. 2
9.. Cadet Second Lieutenant.....	FRANK LUKE	Nov. 25
14.. Cadet First Sergeant.....	FRANK E. BARKER	Oct. 14

Band.

5.. Cadet First Lieutenant.....	EDWIN PERCY ABNOT	Sept. 2
7.. Cadet Bandmaster	RICHARD TOBIN	Sept. 2
12.. Cadet Chief Musician	W. B. HARRINGTON	Sept. 2
23.. Cadet Drum-Major	E. J. ROBERTS	Nov. 12

Signal Corps.

--- Cadet Second Lieutenant.....	Vacancy	
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Cadet Sergeants.

15.. J. G. PRICKHAM	Company A	Sept. 2
16.. E. STEWART	Company B	Sept. 2
17.. J. G. McVICAR	Company A	Sept. 2
18.. A. KELLEY	Company B	Sept. 2
19.. F. WHITAKER	Company A	Sept. 2
20.. B. F. O'HARA	Company B	Sept. 2
21.. M. G. BRADSHAW	Company A	Sept. 2
22.. A. WOLF	Band	Sept. 2
24.. A. T. TAYLOR	Company B	Nov. 12
25.. P. C. LEADBETTER	Company A	Nov. 12

Cadet Corporals.

26.. W. F. GRAHAM	Company A	Sept. 2
27.. F. P. THOMPSON	Company B	Sept. 2
28.. E. LEAVITT	Company A	Sept. 2
29.. J. S. CASE	Company A	Sept. 2
30.. P. CATLIN	Company B	Sept. 2
31.. F. A. E. WELLER	Company A	Sept. 2
32.. F. T. SMITH	Band	Sept. 2

UNIVERSITY ADDRESSES AND SCHOLARSHIPS.

Annual Commencement Address, Friday, May 31, 1901, by President E. A. BRYAN, of Washington College, Pullman, Washington. Subject: "Characteristics."

Annual Baccalaureate Sermon, Sunday, May 26, 1901, by the Rev. HIRAM VAN KIRK Dean of the Berkeley Bible School.

Annual Normal Commencement Address, Wednesday, May 29, 1901, by Professor ELLWOOD P. CUBBERLEY, Head of the Department of Education of Stanford University.

Annual Scholarship Address, Friday, May 31, 1901, by GEORGE S. BROWN, A.B., of Elko, Nevada. Subject: "The Scholar's Responsibilities."

Mr. E. T. COLTON: "The Relation of the Y. M. C. A. to the University.

Dr. J. E. STUBBS: "What is of Most Worth in Modern Education," "A Borrowed Speech," "The Scholar in Public Affairs," "Engineering Education from the Standpoint of the American Association for the Advancement of Science."

Professor ANNA H. MARTIN: "A Morning in Petticoat Lane."

Professor J. M. WILSON: "The Wyoming Irrigation Law."

Rev. C. E. CHASE: "Twentieth Century Education."

Mr. SAMUEL B. DOTEN: "The Survival of the Human Fittest."

Col. and Mrs. DUNCAN: "The American Volunteers."

Miss ALICE MABEL STANAWAY: Special musical program.

Rev. SAMUEL UNSWORTH: "Anarchy."

Rev. H. H. WYMAN: "The Relation of the Christian Faith to Modern Science."

Rev. J. W. PHELPS: "Manhood in Literature."

Miss MARIE C. BREHM: "Temperance."

Professor GEO. D. LOUDERBACK: "The Enjoyment of Nature as Affected by Science."

Dr. LYSANDER W. CUSHMAN: "Evolution; the Modern Scientific Method."

Professor GEO. J. YOUNG: "Some Requirements of a Modern Mining Engineer."

Dr. ROBERT MACKENZIE: "Inspiration."

Senior-Junior Debate. Question: "*Resolved*, That the Combination of Labor is a Greater Menace to the Commonwealth than the Combination of Capital." Affirmative: G. W. SPRINGMEYER, Miss LAURA ORR, Mr. G. E. ANDERSON. Negative: Mr. J. O. McELROY, Miss CARRIE ALLEN, Mr. A. T. TAYLOR.

Freshman-High School Debate. Question: "*Resolved*, That the Standing Armies of Europe are the Best Means of Preserving the Peace of Europe." Affirmative: Mr. JNO. WRIGHT, Mr. J. S. CASE, Mr. EDGAR LEAVITT. Negative: Miss EMILY BERRY, Miss GERTRUDE SHEEHY, Mr. HAROLD LOUDERBACK.

THE FRESHMAN SCHOLARSHIP of \$50, offered by the Alumni Association, was awarded to Miss AGNES GIBSON. Miss MABEL BLAKESLEE received honorable mention.

THE NORMAL SCHOLARSHIP of \$50, offered by the Normal Alumnae, was awarded to Miss EMILY BERRY. Miss MATTIE McMULLEN received honorable mention.

Prize for Best Thesis from School of Liberal Arts—\$20, offered by the Alumni—was awarded to FENTON A. BONHAM.

Prize for Best Thesis from Science Schools—\$20, offered by the Alumni—was awarded to AUGUST H. SCHADLER and to ALFRED R. SADLER.

Freshman Declamation Prizes—\$35, in Books, given by Mr. H. P. KRAUS. Awarded as follows: First Prize—Miss MATTIE McMULLEN. Second Prize—Mr. JOHN W. WRIGHT. Third Prize—Mr. F. A. NATHAN.

THE CHENEY TROPHY, open to Literary Societies of the University, was awarded to Miss ANNA E. SHIER, of the Philomathean Society.

FACULTY AND INSTRUCTORS.

JOSEPH EDWARD STUBBS,

President of the University, Professor of Economics and Ethics.

B.A., The Ohio Wesleyan University, 1873; M.A., 1876; Honorary D.D., German Wallace College, 1890; Instructor Greek and Latin The Ohio Wesleyan University, 1872-75; Superintendent of Schools, Ashland, Ohio, 1880-86; President Baldwin University, Ohio, 1886-94; President Ohio College Association, 1891-92; President Association of American Agricultural Colleges and Experiment Stations, 1899-1900.

HENRY THURTELL,

Dean of the Faculty, Professor of Mathematics and Mechanics.

B.Sc., Michigan Agricultural College, 1888.

HANNAH KEZIAH CLAPP,

Librarian.

M.A., Nevada State University, 1888.

MARY WHITESIDES EMERY,

Professor of Pedagogics and English.

M.A. in Pedagogics, Nevada State University; Illinois State Normal School.

ROBERT LEWERS,

Professor of Logic and Principal of the Commercial School.

RANSOM H. McDOWELL,

Professor of Agriculture and Animal Husbandry.

B.Sc., Michigan Agricultural College, 1874; M.A., 1900.

NATHANIEL ESTES WILSON,

Professor of Chemistry and Dairying.

B.Sc., Maine State College, 1888; M.Sc., Maine State College, 1893.

THOMAS W. COWGILL,

Emeritus Professor of English Language and Literature.

B.A., Harvard University, 1883; M.A., Vanderbilt University, 1888.

RICHARD BROWN,

Instructor in Practical Mechanics; Superintendent of Buildings and Grounds.

JAMES EDWARD CHURCH, Jr.,

Professor of the Latin Language and Literature.

B.A., The University of Michigan, 1892; Ph.D., The University of Munich, 1901.

THE REVEREND SAMUEL UNSWORTH,

Instructor in the Greek Language and Literature.

B.A., St. Stephen's College, 1875; M.A. 1878; S.T.B., General Theological Seminary, 1878.

LAURA DE LAGUNA,

Associate Professor of the Modern Languages.

B.A., Leland Stanford Junior University, 1894.

ANNA HENRIETTA MARTIN,
Lecturer in History of Art.

B.A., Nevada State University, 1894; B.A., Leland Stanford Junior University, 1896, M.A., Leland Stanford Junior University, 1897.

GEORGE FREDERICK BLESSING,
Professor of Mechanical Engineering.

B.M.E., Kentucky State College, 1897.

LYSANDER WILLIAM CUSHMAN,
Professor of the English Language and Literature.

B.A., Pierce Christian College, 1883; B.A., Harvard University, 1886; M.A., Drake University, 1899; Ph.D., Göttingen, 1900.

GEORGE DAVIS LOUDERBACK,
Professor of Geology, Physics and Mineralogy.

B.A., University of California, 1896; Ph.D., University of California, 1899.

LAWRENCE F. J. WRINKLE,
Professor of Mining and Civil Engineering.

Massachusetts Institute of Technology, 1870.

PATRICK BEVERIDGE KENNEDY,

Associate Professor of Botany and Horticulture.

B.S.A., University of Toronto, 1894; Ph.D., Cornell, 1899.

PETER FRANDSEN,
Assistant Professor of Zoölogy and Bacteriology.

B.A., Nevada State University, 1895; A.B., Harvard University, 1898; A.M., Harvard University, 1899.

GEORGE J. YOUNG,
Professor of Metallurgy and Mining.

B.S., University of California, 1899.

HOLLIS CHENERY CLARK,
Professor of Military Science and Tactics.

Captain U. S. A.; West Point, 1891.

JENNIE ELIZABETH WIER,
Associate Professor of History.

B.D., Iowa State Normal School, 1893; B.A., Leland Stanford Junior University, 1901.

J. HENRY DYE,

Instructor in Charge of Department of University Extension.

C.E., University of Michigan, 1895.

MILDRED MAUDE WHEELER,
Instructor in Latin and Mathematics.

B.A., Nevada State University, 1896; M.A., University of California, 1898.

SAMUEL BRADFORD DOTEN,
Instructor in Mathematics and Entomology.

B. A., Nevada State University, 1898.

KATE BARDENWERPER,

Instructor in Domestic Arts and Science.

Graduate of Armour Institute of Technology, 1900.

ADA EDWARDS,

Instructor in Hygiene and Physical Training for Women.

Leland Stanford Junior University.

HEDWIG BERTHA BUSS,
Instructor in Modern Languages and History.
A.B., Leland Stanford Junior University, 1899; M.A., 1900.

LEWIS ANDREW DARLING,
Instructor in Mechanical Engineering and Drawing.
B.M.E., Kentucky State College, 1900.

MRS. ALICE L. LAYTON,
Instructor in Vocal Music.
Graduate New England Conservatory of Music.

HARRY HERBERT DEXTER,
Assistant Librarian.
B.A., Nevada State University, 1899.

MRS. NETTIE W. BLUME,
Mistress of the Girls' Cottage.

ELIZABETH S. STUBBS,
Office Secretary.
B.A., Nevada State University, 1899.

HENRY ROSENGARTEN EVANS,
Instructor in Mining Engineering.
E.M., Colorado School of Mines, 1900.

FACULTY ORGANIZATION.

Chairman	PRESIDENT OF THE UNIVERSITY
Vice-Chairman	Dean HENRY THURTELL
Secretary and Registrar.....	Professor ROBERT LEWERS

STANDING COMMITTEES OF THE FACULTY.

The President of the University is *ex officio* a member of all standing committees and an active member of the Committee on Student Affairs.

I. ON STUDENT AFFAIRS—Dean Thurtell, Professors Lewers, Church, Young, and Superintendent Brown. Secretary, H. H. Dexter.

II. ON CLASSIFICATION OF STUDENTS—Dean Thurtell, Professors Wilson and Frandsen. Secretary, Miss Edwards.

III. ON ADMISSION BY CREDENTIAL OR EXAMINATION—Professors Emery, Kennedy, de Laguna, Blessing, Clark, and Miss Bardenwerper. Secretary, Mr. Darling.

IV. ON CONDITIONS AND REEXAMINATIONS—Professors Young, Wier, Louderback, and Mr. Doten.

V. ON ACCREDITING SCHOOLS—Professors Church, Cushman, de Laguna, and Wier.

VI. ON DEBATING AND LITERARY SOCIETIES—Professors Cushman, Frandsen, de Laguna, and Wier.

VII. ON ATHLETICS—Professors Wilson, Blessing, Kennedy, and Miss Edwards.

VIII. ON THESES AND COURSES OF STUDY—Professors Louderback, Blessing, McDowell, Wrinkle, and Miss Bardenwerper.

IX. ON SCHEDULES AND RECORDS—Professors Lewers, Louderback, Clark, and Mr. Doten.

X. ON GRADUATION AND HONORS—The Faculty as Committee of the Whole.

XI. ON LIBRARY AND PUBLICATIONS—Librarian H. H. Dexter, Professors Church, McDowell, and Wrinkle.

XII. IN CHARGE OF BUILDINGS AND GROUNDS—Superintendent Brown.

NOTE: The regular meetings of the University Faculty will be held at 7:30 p. m. the first Monday evening of each month in Room 6, Morrill Hall.

AGRICULTURAL EXPERIMENT STATION.

THE BOARD OF CONTROL.

Hon. J. N. EVANS (1897-1901)	Reno
Hon. W. E. F. DEAL (1899-1903)	Virginia City
Hon. W. W. BOOHER (1901-1903)	Elko
Mr. GEORGE H. TAYLOR	Secretary

STATION STAFF.

President J. E. STUBBS	Director
Professor R. H. McDOWELL	Agricultural and Animal Husbandry
Professor N. E. WILSON	Chemistry and Dairying
Assistant Professor PETER FRANDSEN	Bacteriology and Zoölogy
Associate Professor P. BEVERIDGE KENNEDY	Botany and Horticulture
Instructor SAMUEL B. DOTEN	Entomology
THEODORE W. CLARK	Foreman of the Farm
ELIZABETH SPAYD STUBBS	Stenographer
H. H. DEXTER	Librarian

ORGANIZATION, EQUIPMENT AND ADMINISTRATION.

FOUNDATION.

The Nevada State University is the head of the educational system of the State of Nevada. It is the only institution of university or college grade and equipment within the State. The Constitution of Nevada declares that "the Legislature shall encourage, by all suitable means, the promotion of intellectual, literary, scientific, mining, mechanical, agricultural and moral improvement," and shall provide for "the establishment of a State University which shall embrace departments for agriculture, mechanic arts and mining." The University was first located at Elko by a law approved March 7, 1873, but was removed to Reno by an Act of the Legislature approved March, 1885, and was formally reopened March 31, 1886. Only a preparatory school was maintained at Elko. The University proper begins with the academic year 1886-87. The support of the University is adequately provided for under the beneficent provisions of the General Government to enable "each State and Territory to maintain at least one college, where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and mechanic arts"; and further by means of biennial appropriations from the legislature of the State.

COLLEGES AND SCHOOLS.

The organization of the University comprises the following Colleges and Schools which aim to meet the best ideas and ideals of modern University life and training:

I. THE COLLEGE OF AGRICULTURE:

1. The School of Agriculture.
2. The School of Domestic Arts and Science.
3. The Short Course in Agriculture.
4. The Short Course in Dairying.
5. The Short Course in Domestic Science.

II. THE COLLEGE OF ARTS AND SCIENCE:

1. The School of Liberal Arts.
2. The School of General Science.
3. The School of Commerce.

III. THE COLLEGE OF APPLIED SCIENCE:

1. The School of Mining and Metallurgy.
2. The School of Mechanical Engineering.
3. The School of Civil Engineering.

IV. THE STATE NORMAL SCHOOL:

1. The Latin Course.
2. The Science Course.
3. The University Course, leading to the degrees of B.A. or B.S.

V. UNIVERSITY HIGH SCHOOL (preparatory to University Colleges and Schools):

1. The Latin Course.
2. The German Course.
3. The English Course.
4. The Commercial Course.

UNIVERSITY HIGH SCHOOL.

In order to supply the need of a good secondary and business education for that large class of young people in the State who do not live within reach of the advan-

tages of a high school, the University maintains preparatory schools of high grade in respect of both discipline and instruction, which have courses of study arranged with particular reference to the University courses.

AFFILIATED SCHOOLS.

The principals of the leading high schools have signified their purpose to prepare students for the University courses, and will meet, so far as possible, the University requirements for admission. All such schools will be designated as "Affiliated Schools," and their graduates will be admitted upon certificate. The University will promote harmony of action and coöperation between its Faculty and the principals of high and grammar schools, with a view to advancing the interests of secondary and higher education in the State.

ADVANTAGES OF SITUATION.

Reno, the seat of the University, is a thriving town of seven thousand inhabitants, situated in the beautiful Truckee valley, and at the junction of three railroads, named, the Southern Pacific Company, a trunk line between the East and the West; the Virginia and Truckee railway, and the California-Nevada-Oregon railway. The noble mountains which girdle the valley, the salubrious air, and the soft sunshine give the town an enviable reputation for health and beauty. Excellent public schools, churches of all the leading denominations, both Catholic and Protestant, a moral and cultured community, offer here the proper conditions for the prosperity and development of University life and work.

BUILDINGS AND GROUNDS.

The University Campus has an area of from thirty-five to forty acres, and is beautifully located on an eminence overlooking the city. There are nine buildings now in use.

MORRILL HALL.

Morrill Hall is a three-story brick building with a large basement. The office of the President of the University and the physical laboratory occupy the first floor, the library occupies the entire basement story, class rooms for the languages, history and mathematics occupy the second floor, while the third floor is given to the use of the University Commercial School and the Drawing Department.

STEWART HALL.

Stewart Hall is also a three-story and basement structure. The first floor is occupied by the professional and training department of the State Normal School. Upon the second floor are general class rooms. The School of Domestic Art and Science occupies the third floor. The basement is in use for the present as a refectory.

HATCH STATION.

Hatch Station was built by the State for the sole use of the Experiment Station, which is supported by the General Government for the purpose of original investigation in the various subjects related to scientific and practical agriculture. The first floor of Hatch Station is occupied by the Departments of Agriculture, Botany and Horticulture. The second floor is given to the Departments of Zoölogy, Bacteriology and Entomology; and the third floor to the Station Library and the mailing department.

MINING BUILDING.

The first floor of the Mining Building is occupied by the Departments of Civil Engineering and Geology. The second floor contains one lecture room, the metallurgical laboratory and the mineralogical laboratory. All these laboratories are fully equipped. The assay office occupies temporary quarters in another building. Any citizen of the State may send mineral specimens to the Mining Laboratory and have determinations and analyses made of the same free of cost. Assays of gold and silver are permitted under the statute.

MECHANICAL BUILDING.

The workshop is a new brick building of superior design. The ground floor is applied to the use of the machine shop, the blacksmith shop, the boiler room. The carpenter shop occupies the second floor and is fitted up with twenty-four benches and an equal number of lockers. Each locker contains the following tools: One rip saw, one cross-cut saw, one hack saw, one bench saw, one set Bailey's planes, one set of chisels, one oil stone, one scratch awl, one steel square, one bevel, one two-foot rule, one pair of dividers, one hammer, one mallet, one marking guage, one drawing knife, one set of awls, one set of screwdrivers, one nail set, two try squares and one broad hatchet. The tool room is provided with every needed variety of wood-working tools. The machine shop is furnished with wood-working and iron-working machines, such as lathes, planers and all kinds of small machine tools of the best make. The blacksmith shop has forges and tools of every kind. A twenty-horse power steam engine supplies ample power.

LINCOLN HALL.

The State Legislature, recognizing the importance of placing the benefits of the University within the reach of all the deserving young men and women of the State, authorized the building of two Student Halls, after the plan of such halls in use by students of the larger Eastern colleges, and appropriated thirty-five thousand dollars for the purpose. The first of these two buildings is known as "Lincoln Hall," and is a tasteful and comfortable home for at least one hundred young men. The plans of Lincoln Hall were drawn after a careful study of the best modern college halls, and seem to meet every requirement of a cultivated taste.

"THE COTTAGE."

The second building, named for the present "The Cottage," is a delightful home for young women. It is located upon the plaza in the southwest part of the campus, and overlooks the town and the valley. The construction material is brick and granite. The architectural features are those of a commodious private dwelling. Besides the single and double rooms, which are sufficient for forty young women, there is a reading room and a parlor for the students and a private parlor and sitting room for the Mistress of the Cottage.

THE GYMNASIUM.

The gymnasium is a modern structure 60 feet wide and 120 feet long. It is equipped both as an armory for the use of the military department and as a gymnasium for athletic training. The equipment is modern and ample for all college purposes; convenient toilet rooms with hot and cold water and lockers for the use of all students are provided.

THE LIBRARY.

The library contains about eight thousand bound volumes and five thousand pamphlets. The books have been selected with particular reference to the requirements of the several departments of study. There is a very complete and serviceable collection of the latest and best books of reference. The reading room is supplied with daily and weekly newspapers and with many of the best literary and scientific periodicals. Many of the papers are furnished to the University through the kindness of their publishers. The library is open from eight o'clock in the morning until five in the afternoon, all days that the University is in session.

THE LABORATORIES.

There are six laboratories—three chemical, one mining, one physical and one physiological laboratory. The chemical laboratories are fully equipped for instruction and investigation. They have private laboratories, store rooms and balance rooms attached. Each student is assigned a locker containing a set of apparatus sufficient for the needs of the course, for which he is responsible, and which must be accounted for at the end of the course. There is a small laboratory fee. A charge is made for breakage also. The physical laboratory is supplied with apparatus sufficient to illustrate all impor-

tant phenomena. The physiological laboratory is equipped with dissecting tables trays, sinks, artificial respiration apparatus, compound microscopes, dissecting microscopes, microtomes, turntables, mounting material, chemicals, balances, etc. The bacteriological laboratory has modern apparatus, such as incubators, steam sterilizers, hot air sterilizers, serum inspissators, microscopes, etc.

SCIENTIFIC COLLECTIONS.

On account of a serious lack of room the University has been unable to make satisfactory provision for its scientific collections, and furthermore has been unable to enlarge the present mineralogical, geological and botanical collections. As soon as the new buildings are completed plans will be carried out for the proper housing of the scientific collections, so that the Museum will be not the least important feature of department work. Friends of the University living in localities where minerals, ores, or natural history specimens may be secured are requested to correspond with the President of the University. All contributions will be recorded and properly acknowledged.

THE ACADEMIC YEAR.

The Academic year of forty weeks begins about the 1st of September and closes about the 1st of June. The year is divided into two terms by the holiday vacation. Examinations are held at the close of each of the two terms.

GOVERNMENT OF THE STUDENTS.

In the government of the University the largest liberty consistent with good work, good order and good character is given the students. There is no formulated code of laws governing their conduct. Their habits of life are expected to be such as to promote daily cultivation of high moral character. They are expected in all their relations to each other and to the University to observe the usages of good society without requiring special regulations for that purpose. They are expected to be punctual and regular in their attendance upon all University exercises. The State provides its bounty for the earnest and industrious student. The indolent or the unworthy will not be retained in the University.

It is assumed that students come to the University for a serious purpose, and that they will cheerfully conform to such regulations as may be from time to time made by the Faculty. Conduct inconsistent with the general good order of the University, if repeated after admonition, will be followed by suspension or dismissal. It is the aim of the Faculty so to administer the discipline of the University as to maintain a high standard of integrity and a scrupulous regard for the truth; and *the attempt of any student to present as his own the work of another, or to pass any examination by improper means, is regarded as a most serious offense, rendering the offender liable to immediate suspension or expulsion.*

DISCIPLINE.

The discipline of the University will be kindly but firmly maintained. Young men and young women who do not intend to give themselves up to the very highest demand of University life are advised to remain at home or to go elsewhere. The same regulations and restrictions will apply to all students, whether they reside in one of the college halls or in any of the homes in the town of Reno.

THE FACULTY.

The Faculty consists of the President, professors, associate professors, assistant professors and instructors. Its routine work is divided among the several standing committees. The Faculty also acts as an advisory body on any question of general policy that may be submitted to it by the President or the Regents.

STUDENT ORGANIZATIONS.

There are several organizations among the students which have for their object mutual helpfulness and improvement. Among these are the Athletic Association and The Student Record Publishing Association. A new organization which has for its object the maintenance of good order and discipline has recently been effected by

the young men of the University. It is intended to develop the quality and power of self-government among the young men of the University, and has the active sympathy and coöperation of the Faculty.

TRAVELING EXPENSES.

The railways of the State are generously coöperating with the Regents of the University by giving reduced rates to students when traveling to and from their homes and the University. The Southern Pacific Company, the Virginia and Truckee, the Nevada Central and the Eureka and Palisade railways will sell tickets to students at one-half the usual local rate. To obtain the benefit of the half rates the student must accompany his application for a ticket with a certificate from the President of the University. These certificates may be obtained by writing to the "President of the State University, Reno, Nevada."

TEXT BOOKS.

All the text books used in the University may be purchased at the Registrar's office at a price which covers the actual cost of purchasing and keeping these books. No credit will be given purchasers of books.

THE LABORATORIES.

To maintain its large and valuable laboratories is a constant and heavy expense to the University. It is impossible for the Regents to provide material in these laboratories free of all expense to the students. For this reason the Regents have established a moderate charge for the use of the material actually used by the student, as follows:

For General Chemistry, per term	\$2 00
For Course in Qualitative Chemistry.....	5 00
For Quantitative Chemistry, per term	2 50
For Agricultural Chemistry, per term	2 50
For Mineralogy, per term	2 50
For Junior Assaying, per term	5 00
For Senior Metallurgy, per term	5 00
For Biology or Bacteriology, per term	2 50
For Practical Mechanics, per term	2 50
For Typewriting, per term	1 00

DEPOSIT FOR BREAKAGE OR DAMAGE.

The following deposit fees will be required of students in the department to which the subject belongs, but will be returned at the end of the year to the student less the amount of breakage or damage of material given to the student. The general guarantee fund is applied to necessary incidental repairs about the grounds and buildings, and no part of this fee will be returned.

General Chemistry, per term.....	\$2 00
Quantitative Chemistry, per term.....	5 00
Qualitative Chemistry, per term	5 00
Agricultural Chemistry, per term.....	5 00
General Guarantee Fund, per term.....	1 00

Students in the Department of Practical Mechanics will furnish their own locks for their lockers and bench drawers.

AIDS TO MORAL AND RELIGIOUS CULTURE.

A Young Men's Christian Association and a Young Women's Christian Association have been organized among the students of the University, and hold stated meetings for religious and social improvement.

The churches of the town of Reno are cordially thrown open to the students, whose interests are largely consulted by the pastors in their pulpit instruction and in their plans of work. There are churches of the following communions in the city, each

with flourishing organizations directed to the spiritual and social life of young people; Roman Catholic, Unitarian, Episcopal, Methodist, Advent, Congregational, Baptist, and Salvation Army.

All the restrictions placed upon the students in their University life rest upon the basis of a sound ethical culture.

FACILITIES FOR PHYSICAL CULTURE.

The University is provided with an excellent gymnasium, and a physical director has charge of the department of physical training and hygiene for young women.

SUPERVISION OF ATHLETICS.

A fine athletic field of six acres loaned to the University by Regent J. N. Evans has been set apart and equipped especially for open-air sports. The campus provides room for tennis courts, as well as for the military drill field. The policy of the University is to foster the spirit of honor and gentlemanliness in athletics, to suppress evil tendencies and to see to it that athletic sports shall not encroach upon the claims of scholarship.

RULES GOVERNING STUDENTS PARTICIPATING IN ATHLETICS.

To represent Nevada State University in any public contest, a student must conform to the following rules:

SECTION I.

RULE 1. He must be an amateur.

RULE 2. If a candidate for a degree, he must attend regularly all the exercises of his class.

RULE 3. If a special student, he must give evidence of good faith regarding his intention to remain a full year in the University. He must also take courses amounting to not less than sixteen hours a week and attend regularly the exercises in such courses.

RULE 4. Like other students, he must maintain satisfactory standing in his class. A student who does not maintain a satisfactory standing in one school of the University cannot, by entering another, alter his status as regards these rules.

RULE 5. He must not receive any form of remuneration; that is, he must not receive any pecuniary benefit whatsoever from his connection with any athletic team.

RULE 6. He must pass a physical examination satisfactory to the Committee on Athletics.

SECTION II.

RULE 1. Schedules for all games must be submitted to the Committee on Athletic Sports and approved by them.

RULE 2. A similar approval is required in the case of every individual intending to represent Nevada State University in any single contest.

EXPENSES OF LIVING.

THE COTTAGE is the University home for young women. Mrs. N. W. Blume, a lady of large experience and wisdom, is Mistress of the Cottage, and gives all her time to the young women of this college home. In regard to ventilation, heating, light and the furnishing of the rooms, all the equipment and arrangements are of the very best kind for the health and comfort and culture of the occupants. Young ladies coming to the Cottage should provide themselves with the following articles:

Four white table napkins; 4 sheets, $2\frac{1}{4}$ yards by $1\frac{1}{2}$ yards; 4 pillow cases, 20 inches by 30 inches; 2 white bed spreads, same size as sheets; 1 pair of blankets; 1 comfort, same size as sheets; 1 comfort, extra thickness, 3 feet by 6, to put on mattress; 6 good towels; 2 aprons for work in shop and in laboratory; personal toilet articles, such as soap, sponges, comb, brushes. All articles of room equipment and personal wearing apparel should be plainly marked with the name of the person.

No special charge is made in the way of room rent to the young ladies.

LINCOLN HALL is the college home for young men. The fine building has accommodations for one hundred young men, and is equal to the best of modern college

halls for young men. The head master of Lincoln Hall is Mr. Richard Brown, who resides in the hall with his family. Young men coming to Lincoln Hall should provide themselves with the following articles:

Four white table napkins; 4 sheets, $2\frac{1}{2}$ yards by $1\frac{1}{2}$ yards; 4 pillow slips, 20 by 30 inches; two white bed spreads, same size as sheets; 1 pair blankets; 1 comfort, same size as sheets; 1 comfort, extra thickness, 3 feet by 6, to put on mattress; 6 good towels; personal toilet articles, such as soap, sponges, comb, brushes. All articles of room equipment and personal wearing apparel should be plainly marked with the name of the person.

No special charge is made to the young men for room rent in Lincoln Hall.

TABLE BOARD—For the accommodation of the students, the President of the University has maintained for several years a dining hall in the basement story of the University building known as Stewart Hall. During the past summer the dining hall equipment and service has been reorganized with a view to securing board and table service of the most acceptable character. The price of table board for the coming year will be \$16 a month, payable in advance. The following special concession is made with a view to the mutual advantage of the University and the students. If the board bill for the month is paid in advance, on or before the fifth day of the month, a rebate of \$1 will be granted, which places the cost of table board per month at \$15. If the board is not paid until after the fifth of the month, the established price of \$16 per month will be collected. If the board bill is not paid by the last day of the month, the privileges of the dining hall will be denied until the bill has been paid. *No deviation will be made from the above regulations.* After the expenses of the dining hall have been fully met, any surplus is paid over to the Board of Regents to pay for service rendered in maintaining the Cottage and Lincoln Hall.

MILITARY SCIENCE AND TACTICS.

1. Appreciation of the advantages of military drill and training in the education of youth is now well-nigh universal. The regular out-of-door drill constitutes one of the best systems of physical training, while at the same time habits of obedience to lawful authority are instilled which assist materially in the development of good loyal citizens. A general knowledge of the system of national defense and of the organization of the Army and Navy and their relations to the civil power is considered essential to intelligent suffrage.

2. This department is in charge of an officer of the United States Army detailed by the War Department as Professor of Military Science and Tactics and who is also Commandant of Cadets.

INSTRUCTION.

3. Instruction in military subjects is both practical and theoretical, special prominence being given to the former. The practical instruction consists of squad, company and battalion drills of infantry, both in close and extended order, small-arms target practice, advance and rear guards, outposts, ceremonies, practice marches, signal drills, etc. Arms and accouterments are furnished by the War Department, and with an ample drill ground and gymnasium the University is well equipped to carry on the practical work. The theoretical course consists of recitations in the U. S. Infantry Drill Regulations and elementary military science, and lectures by the Commandant on military history, military education, the laws of war, strategy, grand and minor tactics. Special attention is given to military conditions as they exist in this country, the special object aimed at being to fit the graduate as far as may be for a commission in the militia, volunteers, or regular service. The names of three cadets graduating highest in the Military Department are annually reported to the War Department for publication in the Army Register.

ATTENDANCE.

4. All male students of the University, including those in the Preparatory, Commercial, and Special classes are required to receive instruction in this department. Those who are physically disqualified for drill may apply to the President to be excused from the practical course only. Every absence must be explained. An unauthorized absence is not only counted as an offense against discipline, but is marked 0. All absences whatever are subject to being made up by extra duty.

ORGANIZATION.

5. Students taking the practical course are designated cadets, and are organized into a corps under the name of the "Nevada State University Corps of Cadets." The habitual formation is that of a battalion of infantry, with band, signal detachment, etc.

UNIFORM.

6. Cadets are required upon entrance to provide themselves with a uniform of prescribed design, consisting of coat, trousers, cap, white gloves, and black shoes, with appropriate insignia.

7. Cadets will wear the uniform during University hours when on the campus, except when engaged in laboratory or shop work, in labor about the buildings and grounds, or in authorized athletic games. Outside the University grounds uniform or civilian clothing may be worn, but the wearing of composite costume is prohibited, except that a civilian overcoat may be worn over the uniform when the weather demands. A cadet will not dispose of his uniform until he severs his connection with the University. Neatness in dress and appearance is at all times insisted upon.

CADET OFFICERS.

8. Cadet officers and non-commissioned officers shall be appointed by the President upon recommendation of the Commandant. Such appointments will hold during the current University year, unless sooner revoked by proper authority. At the close of the University year all appointments in the Corps shall expire by limitation, even though no specific orders issue to that effect.

9. Appointments in the Corps of Cadets shall be determined by:

- (1) Military ability and soldierly deportment.
- (2) Class standing.
- (3) Seniority and length of service in the Corps.

Ordinarily officers will be appointed from the Senior class, Sergeants from the Junior class, and Corporals from the Sophomore class.

10. Cadet officers when on duty as such will report all breaches of discipline coming under their notice to the Commandant.

11. No cadet shall in any way attempt to call to personal account another cadet for having, while in the execution of his office, corrected or reported said cadet.

DISCIPLINE.

12. Discipline is that quality which insures prompt, unhesitating, intelligent obedience to legitimate orders. It is an habitual state of mind which is essential to self-control, to the efficiency, health and comfort of troops, and to the proper care of government property. In order to command, one must learn to obey.

13. Military authority will be exercised at all times with firmness, kindness and justice; and superiors are forbidden to injure those under their authority by tyrannical or capricious conduct or by abusive language.

14. Courtesy among military men is indispensable to discipline.

15. Punishments must conform to law and follow offenses as promptly as justice will permit.

16. The punishments to which cadets are liable are:

- (1) Reprimand, private, public, or in orders. Deprivation of privileges.
- (2) Reduction to ranks of officers and non-commissioned officers. Suspension.
- (3) Dismissal.

Punishments of the first class may be imposed by the Commandant; those of the second class by the Commandant with the approval of the President; those of the third class by the Committee on Student Affairs with the approval of the President.

17. The utmost care will be taken of the arms and other public property. Any cadet damaging same shall make good its value.

18. No cadet shall have in his possession at any time any kind of firearm or weapon other than that regularly used on duty.

19. All combinations against proper authority, under any pretext whatever, are strictly prohibited. All deliberations or discussions having the object of conveying praise or censure or any mark of approbation or disapproval toward superiors are pro-

hibited. Applications for redress of grievances, if made by individuals in a proper manner, will always receive due attention.

20. In general, conduct prejudicial to good order and military discipline is prohibited.

MISCELLANEOUS.

SCHOLARSHIPS.

The friends of education, and particularly the friends of the University, are urged to consider the founding of scholarships. There are many unusually competent young men and young women in the State whose subsequent life would be made eminently useful to their generation by means of the discipline of a University course, but whose financial resources are inadequate to obtain it for them. This University is straining every nerve to provide for such cases, but its ability to do so is far less than the worthy demands made upon it. No means of perpetuating a helpful and elevating influence is at all comparable to that which provides a permanent fund, the proceeds of which shall be devoted to educating the young through the growing centuries.

WANTS OF THE UNIVERSITY.

The attention of the friends of higher education of the State of Nevada is respectfully called to the fact that the State University offers an opportunity for wise beneficence where the results will be large and early. It is a serious mistake not to regard the State University as a noble object for private benevolent endowment. Its work is the praise of those who are competent to pronounce upon its character, but yet its facilities must be greatly increased in order that it may fulfill its mission. Among its most pressing needs we mention the following:

1. Funds for the endowment of scholarships and fellowships.
2. An astronomical observatory.
3. A natural history building.
4. A library building.

GENERAL ASSEMBLY.

A general assembly of all the students of the University and all the members of the Faculty is held every Wednesday. This is the lecture service of the week and is under the special direction of the President of the University. These weekly lectures are given not only by the members of the Faculty, but also by men and women of special eminence in particular fields of study and travel and business enterprise.

AID TO STUDENTS.

It is the purpose of the officers of the University to aid meritorious students of limited means so far as it lies in their power. Almost all of the work in and about the University buildings and grounds is now done by students. The skill that the young men acquire in the carpenter and machine shop enables them to do most of the repairing and building required on the grounds. Young women are favored whenever possible with such work as typewriting, copying and housework. It is to be remembered that the power to favor students with self-help is limited by circumstances, and *therefore students can hardly expect to earn enough to pay all their expenses while pursuing their studies.*

ADMITTANCE, ATTENDANCE AND GRADUATION.

REGISTRATION.

At the beginning of each term each student must register in person at the Registrar's office. Students register for the work of the whole term, and no changes can be made except by permission of the Faculty. No credit will be allowed for work not registered, except by special permission of the Faculty; the required work of the student is based on the average of eighteen to twenty-two hours per week. On account of the numerous laboratory and workshop courses it is necessary to divide large classes into sections for recitations. Every hour for which credit is given is understood to represent approximately, for the average student, three hours of actual work through one term. Thus, in lecture or recitation work, one hour is allotted to the lecture or recitation, and from one and a half to two hours for preparation or subsequent reading by the student. In laboratory, shop and field work, two and one-half hours are required as an equivalent for one hour of class recitation or lecture work.

ATTENDANCE UPON RECITATIONS AND LECTURES.

The requirements for punctual and regular attendance upon all recitations, lectures and other prescribed college exercises are exact and firm. Professors may excuse students on account of necessary absence from their classes, if the reasons seem valid. All unexcused absences are reported to the President's office and may subject the student to admonition, suspension or dismission. Students who find it necessary to leave before the close of the year, and who expect to return, and students desiring to be absent for a period of time, should obtain leave of absence from the President.

CREDENTIALS.

Students intending to enter the University will confer a favor upon the authorities if they will bring a list of the studies completed in the last school attended, together with the grades in the same. A blank will be forwarded for this purpose upon application to the Registrar. Every candidate for admission will find it advantageous to furnish a testimonial from his teachers or employers as to character and efficiency. The President may require from each candidate satisfactory evidence of good moral character.

CONDITIONS OF ADMISSION.

The courses of study published in this register are courses which have been recently prepared by the Faculty of the University. The requirements for admission to these courses are considerably in advance of the requirements of preceding years. It is not deemed just to advance the standard of admission without giving students sufficient notice and time for preparation. For this reason the requirements given below are about the same as for the preceding year.

ADMISSION OF SPECIAL STUDENTS.

Persons who are not candidates for a degree, and who wish to pursue some one study and its related branches, may be admitted as special students without passing the usual entrance examination on the recommendation of the professor under whom the special studies are to be taken; but the professor concerned may impose any test by examination or otherwise that he may deem advisable. Special students are admitted to work only in the University courses. A failure on the part of any special student to maintain a good standing in the special studies to which he is admitted will at once sever his connection with the University.

ADMISSION TO ADVANCED STANDING.

Students from other institutions of recognized collegiate rank who present letters of honorable dismissal may be admitted to such standing and upon such terms as the Faculty may deem equitable. Every such candidate is required to present along with a catalogue of the institution in which he has studied a full statement, duly certified, of the studies he has completed, including studies passed at entrance.

DEGREES.

1. The Degree of Bachelor of Arts (B.A.) will be granted to those who have completed in a satisfactory manner the equivalent of four years' work, and who have satisfied the requirements set forth in the course in Liberal Arts.

2. The Degree of Bachelor of Science (B.S.) will be granted to those who complete satisfactorily any one of the regular courses of study in the Department of Applied Science, viz: the course in Mining or in Agriculture or in Mechanics or in Civil Engineering, or in the School of General Science.

3. Previous to the conferring of the degree the candidate must prepare and submit a satisfactory thesis upon some special or technical subject selected by him with the approval of the professor in charge of the department in which he desires to graduate.

4. The Degree of Master of Arts will be conferred upon graduates from the School of Liberal Arts who shall pursue a prescribed course of study for one year after receiving the degree of B.A. and shall present a satisfactory thesis.

5. The Degree of Master of Science will be conferred upon graduates from the course in Mining or in Agriculture or in Mechanics or in Civil Engineering who shall pursue a prescribed course of study for one year after receiving the degree of B.S. and shall present a satisfactory thesis.

6. The Engineering degrees, viz: Mining Engineer, Mechanical Engineer and Civil Engineer, will be conferred upon graduates in those departments who pursue their technical studies one year more or have been engaged in professional work in positions of responsibility for three years. In either case a further thesis on an entirely original technical topic, or a detailed account or report of the professional work engaged upon, must be presented for acceptance at least thirty days prior to the date of conferring the degree.

THESES REQUIREMENTS.

A satisfactory thesis, prepared in accordance with the following rules, must be presented by each Senior as an essential condition for receiving a degree from any school of the University, or a diploma from the State Normal School.

The thesis is intended to give the student an opportunity to make a comparatively independent effort in some chosen field while still under the guidance of some department, and to test his ability for such independent work in a way that cannot well be done in connection with ordinary class work.

It is expected, therefore, that such thesis will show the following characters, and its merits will be determined upon these points: Originality (comparative) and individual effort; scientific or literary knowledge; careful preparation; good arrangement and presentation of subject; correct English, punctuation and form.

In order to insure time for satisfactory preparation, the student is advised to select the subject as early as possible. All subjects must be selected, accepted by some department, under whose direction the thesis is to be written, and both subject and department reported to the Committee on Theses *not later* than the first Monday in November.

It is expected that thesis work shall continue throughout a large portion of the Senior year and not be relegated to the last few weeks of the last term; and a definite portion of each week should be set aside for such work.

From time to time reports of progress, notes, references, etc., should be presented to the Professor in charge as he directs. Having once registered in a certain department for thesis work, the student is subject to all rules made by that department for such work, and any deficiency in this work will be reported during the term as in the case of class work.

Each department may set a date for the completion of theses under its supervision, but *all theses* should be completed and presented to the Committee on Theses on or before the first day of the final examinations in May.

In final form, the thesis should be prepared upon the officially designated paper and bound in the officially designated cover. All maps and drawings or other illustrations should be so arranged that they can be bound within the same cover. It is required that the thesis be typewritten, as this is not only neater, but three or more copies may be made at one time.

The title page should read:

(Title of Thesis.)

A Thesis

Presented as part requirement for the
(Normal Diploma or Degree of _____, in _____)

by (Name of Writer).

Nevada State University.

(Date.)

This may all be typewritten.

On reverse of title page should appear:

Respectfully submitted by

(Name in Autograph)

Candidate for (Normal Diploma or _____ degree).

Approved: (Name of Professor in Charge in Autograph. Title of Professor in Charge).

Accepted by Thesis Committee: (Name of representative or Chairman).

Any thesis not prepared according to the rules and regulations of a regularly assigned department, or not approved by the head of such department, will not be accepted for any degree or diploma.

The thesis must be written in some department in which the student is pursuing or has pursued advanced work, or which is distinctly connected with the life work his course indicates he has taken.

A certain day is set aside during Commencement week for the public reading of theses. Each student will be allowed not more than twenty minutes for reading, and this will necessitate frequently the cutting out or abstracting of certain parts. The Professor in charge should be consulted as to the parts most desirable to omit or condense for such reading.

Any student who finds that he cannot be present on Thesis Day, on account of sickness or other good excuse, is under obligation to secure some one to read his thesis—preferably some classmate or instructor—and to report the fact to the Committee before the time of such reading.

It is understood that if any prizes or other awards be made for the most successful thesis under any given conditions of judgment, that only those theses that are presented on Thesis Day may be candidates for such awards.

The final copy, approved by the Professor in charge, and accepted by the Committee on Theses, becomes the property of the University, and is filed for record and reference.

ADMISSION OF STUDENTS.

I. BY CERTIFICATE.

1. The accrediting committee will determine in each case, on presentation of certificate or other evidence, whether the work done by the applicant meets the entrance requirements.

Note: As a way of ascertaining how the different schools and teachers in the State shall be accredited, information blanks will be sent out in January of each year to the principals and teachers of our schools. These blanks will ask for:

- (1) Grade of school.
- (2) Year in the course.
- (3) Subjects studied.
- (4) Time given to each in hours and weeks.
- (5) Methods and apparatus.
- (6) Name of student with grades.

2. Graduates of grammar grades may be admitted to the Junior year of the high school upon the certificate and recommendation of their former teachers. If any subject of high school grade has been studied it may be accredited in accordance with the provisions of Article I.

3. Any applicant holding a teacher's certificate may offer such certificate in lieu of examinations in so far as the subjects included in said certificate shall be deemed equivalent to the University requirements.

II. BY EXAMINATION.

1. All students entering the University must pass an examination in English composition. (See suggestions to teachers and students, page 28 of the Register.)

2. Applicants from non-accredited schools and teachers, claiming to have studied certain subjects, must pass an examination in these subjects. The University examiners will determine in each case whether the subjects offered are equivalent to those required by the University.

PROMOTION BY EXAMINATION.

1. All students shall be required to pass an examination at the end of each semester (Seniors included); this examination to cover the work of the semester.

Note: By examination is understood an ordinary examination or some equivalent exercise.

2. Students shall be graded by letters and by per cent:

a denotes 90 to 100 per cent.

b denotes 80 to 90 per cent.

c denotes 70 to 80 per cent.

d denotes 50 to 70 per cent; conditional failure.

e denotes complete failure.

Final grades shall be reported to the Registrar by per cent.

3. Each teacher is required each month to record in his classbook the grade of each student for that month, said standing to be based upon the *personal estimate* of the teacher or upon *oral or written examination* according to the discretion of the teacher; such marks to be made known to students by the letters *a*, *b*, *c*, *d* and *e*.

4. The average of the various markings during the semester shall constitute one-half of the final grade for the semester. The final examination shall also constitute one-half.

5. Students receiving *d* for any month shall receive warning from the instructor; students receiving *e* shall be reported to the President.

6. Students absent from any cause whatever one-fifth of the time during any semester must pass an extra examination in addition to the regular final examination. This extra examination helps to complete the term standing, but does not abolish it.

7. Students will be expected to register, begin recitations and take all examinations according to the University calendar and schedules, and in all cases attendance will be reckoned from the date instruction begins.

TERM CONDITIONS.

1. Any student having a final standing of *d* in any subject is conditioned in that subject for the semester. This condition must be removed at the beginning of the following semester.

A student having a final standing of *e* in any subject has made a complete failure and must take the subject over in class.

The term standing will be reckoned one-half in all cases of re-examination.

2. A student having conditions of more than two-fifths of the number of hours required by the course to which he is accredited in any semester will not be permitted to register the following semester.

This rule does not apply to entrance conditions.

ENTRANCE CONDITIONS.

3. A student may be admitted to the Freshman Class or to the First Year Normal with an entrance condition of not more than ten credits; but this entrance condition must be removed within one year from date of admission.

HOURS REQUIRED.

4. No student may take in any semester more hours than belong to the course to which he is accredited, without special action of the Committee on Classification. No student may take fewer than four-fifths of the number of hours required by his course without permission of the Committee on Classification.

Students wishing to take special work in the University for which they may be prepared will be governed as to the subjects and hours by the judgment of the Committee on Classification.

REQUIREMENTS FOR ADMISSION TO THE FRESHMAN CLASSES.

Applicants for admission to the Freshman Class in any of the College Courses must be at least fifteen years of age; must give satisfactory references from their last instructor concerning moral character; and must, by examination or by certificate, give evidence of proficiency in such of the subjects as are designated below for the course and status sought.

I. ADMISSION ON EXAMINATION.

The Times and Places of Examination.—The University will conduct examinations May 26-28, 1902, in any town or at any school where the number of candidates and the distance from other places of examination may warrant it. Application for this purpose should be sent to the President of the University not later than May 1, 1902.

SUBJECTS FOR ADMISSION TO THE UNIVERSITY SCHOOLS.

All the subjects in Group I—namely, English, Mathematics, History, Latin, Science and Art—are required for admission to the Freshman Class, but certain subjects—French, German, Spanish or Science—may be offered in place of Latin. Subjects in Group II required for admission to First Year Normal.

To be of real value to the pupil and to serve as a true preparation for college work, the preparatory subjects must be pursued in the proper sequence, in accordance with the best methods, and with persistence and vigor; the aim should be to concentrate the time and energy upon the few most essential subjects and to prepare these thoroughly. It is only thus that a foundation sufficiently broad and firm can be laid for successful future work. Hence, consecutive work, in any given subject, and frequent weekly recitations, are matters of prime importance.

LIST OF ENTRANCE SUBJECTS.

SUBJECTS.	GROUP I. 60 units required for admission to Freshman Class College of Arts and Science and Normal Colleges.	GROUP II. 40 units required for admission to First Year Normal.
1. English (15 units): a. Literature _____ b. Composition _____ c. Spelling _____ d. Grammar _____	10 units 5 units	10 units 5 units
2. Mathematics (15 units): a. Arithmetic _____ b. Algebra _____ c. Plane Geometry _____	5 units 5 units 5 units	5 units 5 units -----
3. History (15 units): a. Of the United States and Civics _____	5 units	-----
4. Latin (15 units): a. First Year _____ b. Second Year _____ c. Third Year _____	5 units 5 units 5 units	5 units 5 units -----
5. Science: a. Physics _____ b. Bookkeeping _____	5 units 2½ units	----- 2½ units
6. Art: Freehand Drawing _____	2½ units	2½ units

SUBSTITUTIONS.

For admission to any of the Science courses, an equivalent number of units from the following subjects may be offered in place of Latin:

1. French (15 units):	
a. First Year.....	5 units
b. Second Year.....	5 units
c. Third Year.....	5 units
2. German (15 units):	
a. First Year.....	5 units
b. Second Year.....	5 units
c. Third Year.....	5 units
3. Science (15 units):	
a. Physical Geography.....	5 units
b. Botany.....	5 units
c. Physiology.....	5 units
d. Chemistry.....	5 units
e. Zoölogy.....	5 units
4. History (15 units):	
a. English History.....	5 units
b. Ancient History.....	5 units
c. Economics.....	5 units

SUGGESTIONS TO TEACHERS AND STUDENTS.

1. ENGLISH.

a. *Grammar*—One of the common school text books on English Grammar should be thoroughly mastered. Special attention should be given to oral analysis and to parsing. (Omit False Syntax.) Swinton's New English Grammar or Reed and Kellogg's Higher Lessons in English indicates the character and amount of work required.

b. *Composition*—The applicant will be tested as to his ability to write correct English. Each applicant will be required to write an essay of not less than four pages of foolscap. The subject may be taken from the literature studied or from the applicant's observation and experience. The essay must be correct in form and be neatly written; it must be correct in grammar, spelling, use of capitals, and punctuation. As a rule, the sentences should be short. Redundant expressions and diffuseness of style should be avoided. The words must be selected with care. The essay, as a whole, must be logically arranged and readable. For rules and terminology, see Genung's Outlines of Rhetoric or Hill's Foundations of Rhetoric.

c. *Spelling, penmanship, the use of capitals and punctuation* will be tested in the essay required above. Poor work in any of these subjects will cause the essay to be rejected.

d. *Oral Reading*—The applicant will be required to read aloud at sight ordinary prose and poetry. The words must be pronounced correctly; the pieces must be read with the proper emphasis and modulation of voice.

e. *Literature*—The requirement in English Literature presupposes a study of the works prescribed in the High School course of study. The examination will be based upon the works studied in the High School and will cover the following general topics:

- (1) The analysis of the pieces read.
- (2) The explanation of the historical, geographical and mythical allusions contained in the pieces read.
- (3) The explanation of all ordinary grammatical and rhetorical questions (construction of words, figures of speech, prosody, etc.).
- (4) The description of the characters of the pieces, both as to their motives and as to their outward appearance.
- (5) Some facts concerning the life and times of the authors read.

2. MATHEMATICS.

a. *Arithmetic*—The essentials of Arithmetic as given in Walsh's Higher Arithmetic or an equivalent text-book. Applicant should have a thorough knowledge of the principles underlying arithmetical processes, especial attention being given to the analytical treatment of problems, and to quick and accurate mental computations.

b. Algebra—A good knowledge of the fundamental operations—the various methods of factoring, highest common factor, lowest common multiple, theory of fractional and negative exponents, radicals including rationalization, equations of the first and second degree, in one or more variables, quadratic equations, the formation of equations with given roots, rates, proportion, arithmetical and geometrical progression—is required. A satisfactory treatment of the topics in Algebra may be found in such text-books as Wells' Academic Algebra, Wentworth's New School Algebra, or Bowser's Academic Algebra.

c. Plane Geometry—A thorough knowledge of the subject as given in such texts as Beaman & Smith's Plane Geometry, Wentworth's New Plane Geometry, or an equivalent text-book. The pupil should be taught to see the truth of the existing relations in problems by the sense seeing as well as reasoning. To this end, great importance is placed upon neat and accurate construction. The test of the applicant's knowledge of the subject is his ability to apply principles in the solution of original problems.

3. HISTORY AND ECONOMICS.

- a. American History and Civics*—5 credits. (Texts and divisions to be added later.)
- b. English History*—5 credits.
- c. Ancient History*—5 credits.
- d. Economics*—5 credits.

Note: General requirement for all courses: All candidates who offer History for entrance must submit history note-books as a part of the examination test. This requirement will be imposed on students entering on certificate as well as those who take examinations. These note-books should contain:

- (1) The notes made by the pupil in the class room.
- (2) Syllabi, reading notes, analyses, abstracts, summaries, etc.
- (3) Special investigations, including the original notes and the finished thesis.
- (4) Historical maps made by the pupil.
- (5) Examination papers.

The Department of History at the University will, upon application, give printed suggestions with regard to methods of work and desirable additional reading.

4. LATIN.

a. Grammar—A thorough preparation in the elements of Etymology and Syntax, as found in Collar and Daniell's First Latin Book and Bennett's Latin Grammar.

b. Prose Composition—Ability to translate into Latin a selected passage of English narrative based upon one of the texts read.

c. Reading—Collar's New Gradatim; fifteen exercises in Viri Romæ or a corresponding amount in Nepos; four orations of Cicero. In place of two orations of Cicero may be substituted two books of Cæsar's Gallic War; four books Vergil's Æneid. The University, however, desires not so much to fix the amount of Latin to be read as to urge through preparation in the reading and writing of Latin of moderate difficulty. Three years of daily recitation should be given to the preparatory work in Latin.

The applicant for admission should be able to pronounce Latin words readily and accurately. The Roman method of pronunciation is used at the University.

d. Roman History—In addition to the above preparation will be required a knowledge of Roman history as far as the reign of Augustus.

5. FRENCH.

a. A thorough knowledge of the principles of Grammar. This involves an accurate understanding: (1) Of the inflections and conjugation; (2) of the elements of Syntax, especially the various uses of the article, the pronoun, the partitive constructions, the agreement of participles, and the subjunctives.

b. A careful study of the more common idioms.

c. Facility in translating simple English into French and moderately easy French into English.

d. Fluency and correctness in pronouncing French.

The following texts are recommended for use: Chardenal's Complete French Course; Super's French Reader, Parts I and II; Whitney's French Grammar, Part I;

Enault's *Le Chien du Capitaine*; Labiche's *Le Voyage de M. Perrichou*; Halévy's *L'Abbé Constantin*; Mérimée's *Colomba*.

6. GERMAN.

a. A mastery of the elements of grammar, including the declensions, conjugations, special uses of the cases, word-order, the force of prefixes and suffixes, and the uses of the subjunctive.

b. Facility in translating easy English into German, and moderately simple German into English at sight.

c. Ability to pronounce German correctly and fluently.

The following texts, or their equivalents, will provide the necessary preparation; Collar's Eysenbach; Van Daell's German Reader; Baumbach's Waldnovellen; Schiller's *Die Jungfrau von Orleans* and *Maria Stuart*; Harris' Prose Composition, the first 26 exercises.

7. SCIENCE.

a. Physiology—The anatomy, histology, and physiology of the human body and the essentials of hygiene, taught with the aid of charts, to the extent given in Martin's *Human Body* (Briefer Course) or an equivalent text-book.

b. Physical Geography—The leading physical facts in their relations as given in Tarr's *First Book of Physical Geography*.

c. Chemistry—The elements of Chemistry as given in such text-books as Shepard's *Elements of Chemistry*, or the equivalent. Laboratory practice is essential.

d. Botany—Any course will be satisfactory which brings the pupil directly into contact with plants, especially in their natural surrounding out of doors. Gray's *Structural Botany*, together with a manual for the determination of the plants in the local flora, should be used in connection with the laboratory and out-of-door work.

e. Physics—The elements of Physical Science as presented in such text-books as Gage's *Elements of Physics*, or equivalent texts, with practical work in the laboratory by the student, or by the instructor in the presence of the class, and the calculation of problems arising in the work.

UNIVERSITY COLLEGES AND SCHOOLS.

I. THE COLLEGE OF AGRICULTURE.

1. The School of Agriculture.
2. The School of Domestic Arts and Science.
3. The Short Course in Agriculture.
4. The Short Course in Dairying.
5. The Short Course in Domestic Science.

The College of Agriculture comprises two Schools and three Short Courses, as follows:

- (1) The School of Agriculture, leading to the degree of Bachelor of Science.
- (2) The School of Domestic Arts and Science, leading to the degree of Bachelor of Domestic Science.
- (3) The Short Courses in Agriculture, in Dairying and in Domestic Arts and Science will be given in January, February and March of each year. No examinations are required of those taking the "Short Courses."

The courses in Agriculture and Domestic Science present to the student such subjects as will provide him with a liberal industrial education. Text and practical work go hand in hand throughout the course of four years. The number of text studies carried by the student at any one time is small, in order that he may in no way be disqualified to carry on the practical work prescribed. By this, provision is made also for advanced students to do special work in such lines as they may choose. The various University departments are well equipped to meet the demands peculiar to this school. The Agricultural Experiment Station, with its farm in actual operation, adds much to this school, as here the student is permitted to observe and possibly take part in scientific investigation. The sciences that are necessary to a thorough knowledge of the underlying principles of agriculture and horticulture are fully treated.

THE SCHOOL OF AGRICULTURE.

FRESHMAN YEAR.

	Credits.
English—Literature (2) and Composition (1a); <i>three hours</i>	3
German—Elementary German (1); <i>four hours</i>	4
Mathematics—College Algebra (1); <i>five hours</i>	5
Chemistry—General Chemistry (1); <i>three hours, one period</i>	4
Mechanics—Carpentry and Joinery (1); <i>two hours</i>	2
Drawing—Freehand Drawing (3); <i>five hours</i>	2
Military—Tactics; <i>one hour. Drill; three hours</i>	1

Second Semester.

English—Literature (2) and Composition (1); <i>three hours</i>	3
German—Elementary German (1); <i>four hours</i>	4
Mathematics—Solid Geometry (2) and Plane Trigonometry (2); <i>five hours</i>	5
Chemistry—General Chemistry (1); <i>three hours. Qualitative Analysis (3); three periods</i>	6
Mechanics—Carpentry and Joinery (1); <i>two hours</i>	2
Drawing—Mechanical Drawing (3); <i>five hours</i>	2
Military—Tactics; <i>one hour. Drill; three hours</i>	1

SOPHOMORE YEAR.

First Semester.

German—Schiller's Jungfrau von Orleans and Prose Composition (2); <i>four hours</i>	4
Mathematics—Spherical Trigonometry (3); and Plane Analytical Geometry (3); <i>five hours</i>	5
Zoölogy—General Zoölogy (1); <i>two hours, two periods</i>	4
Physiology—Physiology and Hygiene (5); <i>four hours</i>	4
Physics—Laboratory Physics (1); <i>two periods</i>	2
Mechanics—Shop Work (2); <i>two periods</i>	2
Drawing—Advanced Freehand Drawing (5); <i>five hours</i>	2
Military—Tactics; <i>one hour. Drill; three hours</i>	1

Second Semester.

German—Schiller's Wilhelm Tell and Maria Stuart (2); <i>four hours</i>	4
Botany—General Botany (1); <i>two hours, two periods</i>	4
Chemistry—Quantitative Chemistry (4); <i>three periods</i>	3
Physics—Laboratory Physics (1); <i>two periods</i>	2
Mechanics—Shop Work (2); <i>two periods</i>	2
Horticulture—Plant Culture, Pomology (7); <i>five hours</i>	5
Military—Tactics; <i>one hour. Drill; three hours</i>	1

THE SHORT COURSE IN AGRICULTURE.

This course will be offered during the months of January, February and March, each year. It is designed for the practical benefit of farmers and ranchers. No examinations, no fees.

THE SCHOOL OF AGRICULTURE.

JUNIOR YEAR.

First Semester.

	Credits.
English—English Composition six themes (1b); <i>one hour</i>	1
Agriculture—Soils and Farm Crops (1); <i>five hours</i>	5
Engineering—Surveying (1): Class, <i>three hours</i> ; Field, <i>two periods</i>	5
Chemistry—Agricultural Chemistry (5); <i>two hours, two periods</i>	4
Geology—Dynamic and Structural Geology (2); <i>three hours</i>	3
Political Science—Municipal Law and Ethics (1); <i>three hours</i>	3
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1

Second Semester.

English—English Composition, six themes (1b); <i>one hour</i>	1
Agriculture—Plant Production, Fertilizer, Stock Feeding and Farm Economics (1); <i>five hours</i>	5
Engineering—Irrigation Engineering (1): Class, <i>two hours</i> ; Field, <i>one period</i>	3
Chemistry—Agricultural Chemistry (5); <i>two hours, two periods</i>	4
Botany—Economic Botany (8); <i>two hours, two periods</i>	4
Political Science—International Law and Ethics (2); <i>three hours</i>	3
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1

SENIOR YEAR.

First Semester.

English—English Composition, three forensics (1c); <i>one hour</i>	1
Agriculture—Breeds of Live Stock, Principles of Breeding (2); <i>five hours</i>	5
Forestry—Forest Supply (3); <i>three hours</i>	3
Anatomy—Comparative Anatomy (2); <i>two hours, two periods</i>	4
Veterinary Science—Diseases of Animals and their Remedies (4); <i>five hours</i>	5
Political Science—Elements of Economics; <i>three hours</i>	3
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1

Second Semester.

English—English Composition, three forensics (1c); <i>one hour</i>	1
Agriculture—Stock Breeding and Stock Feeding (2); <i>five hours</i>	5
Anatomy—Comparative Anatomy (2); <i>two hours, two periods</i>	4
Dairying—Dairying (6); <i>two hours, one period</i>	3
Bacteriology—Lectures and Laboratory Work (6); <i>two hours, one period</i>	3
Entomology—Anatomy, Transformations and Classification of Insects (1); <i>three hours</i>	3
Political Science—Political Economy (4); <i>three hours</i>	3
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1

THE SHORT COURSE IN DAIRYING.

This course will be offered during the months of January, February and March, each year, in connection with the Short Course in Agriculture. It is given for the practical benefit of farmers and ranchers. No examinations, no fees.

THE SCHOOL OF DOMESTIC ARTS AND SCIENCE.

The course of study in the Department of Domestic Arts and Science covers a period of four years. Young women who have completed the subjects required in the public schools of Nevada below the High School may be admitted to the First Year of this course either by certificate or by examination.

FIRST YEAR.

First Semester.

	Credits.
English—English Literature; <i>three hours</i>	3
English—English Grammar; <i>four hours</i>	4
English—Composition and Spelling; <i>one hour</i>	1
Mathematics—Arithmetic, including Metric System, <i>three hours</i> . Algebra, <i>two hours</i>	5
Sewing—Sampler Work; Various stitches used in Hand-Sewing; Mending; Use of Sewing Machine; Draughting and Making of Undergarments (1); <i>two periods</i>	2
Cookery—Care of kitchen, china, glass, etc.; Food Values; Preparation and Composition of Simple Foods, eggs, cheese, soups, meats, vegetables, sauces, batters, doughs (5); <i>two periods</i>	2
Bookkeeping—Elements of Bookkeeping (1); <i>three hours</i>	3
Hygiene—Physical Training for Women; <i>three hours</i>	1

Second Semester.

English—English Literature; <i>three hours</i>	3
English—English Grammar; <i>four hours</i>	4
English—Composition and Spelling; <i>one hour</i>	1
Mathematics—Arithmetic, including Metric System; <i>three hours</i> ; Algebra, <i>two hours</i>	5
Sewing—Advanced Hand and Machine Sewing; Fitting and making of shirt-waists and cotton dresses; Making of children's dresses; Draughting of patterns from measure (1); <i>two periods</i>	2
Cookery—Food Values; Marketing, cuts of meats, etc.; Composition and preparation of more elaborate dishes, frying, roasting, broiling, entrées, salads, sauces, desserts, frozen creams, ices, sherbets (5); <i>two periods</i>	2
Bookkeeping—Elements of Bookkeeping (1); <i>three hours</i>	3
Hygiene—Physical Training for Women; <i>three hours</i>	1

SECOND YEAR.

First Semester.

English—English Literature; <i>three hours</i>	3
English—Composition and Spelling; <i>one hour</i>	1
Mathematics—Elementary Algebra; <i>five hours</i>	5
Chemistry—General Chemistry (8a); <i>two hours, one period</i>	3
Sewing—Draughting of skirts and waists from chart; Fitting and making of dress from woolen materials (2); <i>two periods</i>	2
Cookery—Dining-room and its appointments; Serving of meals; Composition and preparation of more elaborate dishes, fancy cakes, souffles, frostings and sauces, pastries, puff paste, salads and salad dressings (6); <i>two periods</i>	2
Drawing—Freehand Drawing (3); <i>five hours</i>	5
Hygiene—Physical Training for Women; <i>three hours</i>	1

Second Semester.

English—English Literature; <i>three hours</i>	5
English—Composition and Spelling; <i>one hour</i>	1
Mathematics—Elementary Algebra; <i>five hours</i>	5
Chemistry—General Chemistry (8a); <i>two hours, one period</i>	3
Sewing—Matching of plaids and stripes; Elementary Millinery, including facings, etc., bow-making, etc. (2); <i>two periods</i>	2
Cookery—Invalid dishes (6); <i>two periods</i>	2
Drawing—Freehand Drawing (3); <i>five hours</i>	5
Hygiene—Physical Training for Women; <i>three hours</i>	1

THE SCHOOL OF DOMESTIC ARTS AND SCIENCE

The aim of the course is to give cultural as well as technical training. The English language and literature have a place in each year. Arithmetic and algebra are studied through two years. The French language is pursued during the third and fourth years. Chemistry, physiology and bacteriology represent the sciences closely related to the household subjects, while history and art and drawing touch upon social interest.

THIRD YEAR.

	<i>First Semester.</i>	<i>Credits.</i>
English—English Literature; <i>three hours</i>		3
English—Composition and Spelling; <i>one hour</i>		1
French—Elementary French (6); <i>four hours</i>		4
Chemistry—Applied Chemistry (8b); <i>two hours, one period</i>		3
History—United States History and Civics; <i>five hours</i>		5
Sewing—Draughting and Making of Fancy Waist; Millinery—Covering of Buckram Frames and Tam Crowns; Lectures on Outline and Color (3); <i>two periods</i>		2
Cookery—Preserving and Canning; Candy-Making; Advanced Cookery (7); <i>two periods</i>		2

Second Semester.

English—English Literature; <i>three hours</i>		3
English—Composition and Spelling; <i>one hour</i>		1
French—Elementary French (6); <i>four hours</i>		4
Chemistry—Applied Chemistry (8b); <i>two hours, one period</i>		3
History—United States History and Civics; <i>five hours</i>		5
Sewing—Renovating; Practice in Designing; Study of Artistic Principles; Use of Practice Materials in Making Dress Trimmings and Finishings; Millinery— Shirred Hats; Wire-frame Making; Making of Buckram Frames, etc. (3); <i>two periods</i>		2
Cookery—Chafing Dish Course; Practice Work in General Cookery; Advanced Cookery (7); <i>two periods</i>		2

SENIOR YEAR.

	<i>First Semester.</i>	
English—Literature (2) and Composition (1a); <i>three hours</i>		3
Dietetics—Practical Dietaries for Housekeepers (8c); <i>two hours</i>		2
Physiology—Physiology and Hygiene (5); <i>four hours</i>		4
Household Economics—Home Sanitation; Cost of Living (9); <i>one hour</i>		1
Cookery—Planning and cooking a simple meal according to approved dietetic standards; Fancy cookery; Serving of luncheon (8); <i>two periods</i>		2
Art—History of Art (5); <i>one hour</i>		1
French—Modern Prose and Prose Composition (7); <i>four hours</i>		4
Bacteriology—Lectures and Laboratory (6); <i>two hours, one period</i>		3

Second Semester.

English—Literature (2) and Composition (1a); <i>three hours</i>		3
Dietetics—Practical Dietaries for Housekeepers (8c); <i>two hours</i>		2
Household Economics—Home Sanitation; Cost of Living (9); <i>one hour</i>		1
Sewing—Tailoring; Millinery—Advanced Millinery (4); <i>two periods</i>		2
Art—History of Art (5); <i>one hour</i>		1
French—Modern Prose and Composition (7); <i>four hours</i>		4
Dairying—Butter and Cheese-making; <i>three hours, two periods</i>		5
Thesis—Thesis; <i>two hours</i>		2

II. THE COLLEGE OF ARTS AND SCIENCE.

The College of Arts and Science comprises three Schools, as follows:

(1) The School of Liberal Arts, leading to the Degree of Bachelor of Arts.

(2) The School of General Science, leading to the Degree of Bachelor of Science. Both of these Schools give considerable freedom as to choice of subjects in the Junior and Senior years.

(3) The School of Commerce, leading to the degree of Bachelor of Science. This School offers a course of study adapted to broad and thorough training for business life.

THE SCHOOL OF LIBERAL ARTS.

FRESHMAN YEAR.

	First Semester.	Credits.
English—Literature (2) and Composition (1a); <i>three hours</i>	3	
Latin—Vergil's <i>Aeneid</i> (7); <i>Mythology</i> (1); <i>five hours</i>	5	
Mathematics—College Algebra (1); <i>five hours</i>	5	
History—Medieval History (1); <i>three hours</i>	3	
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1	
Hygiene—Physical Training for Women (1); <i>three hours</i>	1	
Elective—Beginning Greek (1), French (6), or German (1); <i>four hours</i>	4	

Second Semester.

English—Literature (2) and Composition (1a); <i>three hours</i>	3
Latin—Vergil's <i>Aeneid</i> (7); <i>five hours</i>	5
Mathematics—Solid Geometry; <i>three hours</i> . Plane Trigonometry (2); <i>two hours</i>	5
History—Medieval History (1); <i>three hours</i>	1
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1
Hygiene—Physical Training for Women (1); <i>three hours</i>	1
Elective—Beginning Greek (1), French (6), or German (1); <i>four hours</i>	4

SOPHOMORE YEAR.

First Semester.

English—English Literature (3); <i>three hours</i>	3
Latin—Cicero's <i>de Senectute</i> , Prose Composition, Sight Reading (3); <i>three hours</i>	3
Chemistry—General Chemistry (1); <i>two hours, one period</i>	3
History—European History (2); <i>three hours</i>	3
Physics—Laboratory Physics (1); <i>two periods</i>	2
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1
Hygiene—Physical Training for Women (1); <i>three hours</i>	1
Elective—Greek: Homer's <i>Iliad</i> or <i>Odyssey</i> , Prose Composition (2); French: Modern Prose and Prose Composition (7); German: <i>Jungfrau von Orleans</i> (2) and Prose Composition (2); <i>four hours</i>	4

Second Semester.

English—English Literature (3); <i>three hours</i>	3
Latin—Plautus and Terence, Roman Literature (5 and 6); <i>three hours</i>	3
Chemistry—General Chemistry (1); <i>two hours, one period</i>	3
History—European History (2); <i>three hours</i>	3
Physics—Laboratory Physics (1); <i>two periods</i>	2
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1
Hygiene—Physical Training for Women (1); <i>three hours</i>	1
Elective—Greek: Homer's <i>Iliad</i> or <i>Odyssey</i> , Prose Composition (2); French: Modern Prose and Prose Composition (7); German: Schiller's <i>Wilhelm Tell</i> and <i>Maria Stuart</i> (2); <i>four hours</i>	4

THE SCHOOL OF LIBERAL ARTS.

The course in Liberal Arts is designed to give students the general knowledge, culture and discipline which will make them intelligent citizens and members of society. It is not a professional course, and is not intended to take the place of such a course. The branches herein offered are universally regarded as the basis of a liberal education, and have long been studied as the best means of mental discipline and general culture. The course is almost as extensive and complete as the corresponding course given in the best colleges, and by means of a liberal system of electives offers students a considerable range of choice in course of study.

In the Junior and Senior years each student is required to elect at least six hours advanced work in subjects pursued in Freshman and Sophomore years.

JUNIOR YEAR.

	Credits.
English—English Composition, six themes (1b); <i>one hour</i>	1
Political Science—Municipal Law and Ethics; <i>three hours</i>	3
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1
Hygiene—Physical Training for Women (1); <i>three hours</i>	1
Electives—From subjects offered in any school, but with approval of Faculty Committee; <i>fourteen hours minimum</i>	14

Second Semester.

English—English Composition, six themes (1b); <i>one hour</i>	1
Political Science—International Law and Ethics; <i>three hours</i>	3
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1
Hygiene—Physical Training for Women (1); <i>three hours</i>	1
Electives—From subjects offered in any school, but with approval of Faculty Committee; <i>fourteen hours minimum</i>	14

SENIOR YEAR.

	Credits.
First Semester.	
English—English Composition, three forensics (1c); <i>one hour</i>	1
Economics—Principles of Economics; <i>three hours</i>	3
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1
Hygiene—Physical Training for Women (1); <i>three hours</i>	1
Electives—From subjects offered in any school, but with approval of Faculty Committee; <i>fourteen hours minimum</i>	14

Second Semester.

English—English Composition, three forensics (1c); <i>one hour</i>	1
Economics—Political Economy (4); <i>three hours</i>	3
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1
Hygiene—Physical Training for Women (1); <i>three hours</i>	1
Electives—From subjects offered in any school, but with approval of Faculty Committee; <i>fourteen hours minimum</i>	14

THE SCHOOL OF GENERAL SCIENCE.

The School of General Science differs from the School of Liberal Arts, as its name indicates, in the prominence given to subjects in pure science: Algebra, Geometry, Trigonometry, and Calculus. Chemistry, Zoölogy, Botany, Physiology and Physics hold the first place in the Freshman and Sophomore years. English, German and Hygiene also receive a due share of time.

FRESHMAN YEAR.

	First Semester.	Credits.
English—Literature (2) and Composition (1a); <i>three hours</i>	3	
German—Elementary German (1); <i>four hours</i>	4	
Mathematics—College Algebra (1); <i>five hours</i>	5	
Chemistry—General Chemistry (1); <i>three hours, one period</i>	4	
Zoölogy—General Zoölogy (1); <i>four hours</i>	4	
Drawing—Freehand Drawing; <i>five hours</i>	2	
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1	
Hygiene—Physical Training for Women (1); <i>three hours</i>	1	

Second Semester.

English—Literature (2) and Composition (1a); <i>three hours</i>	3	
German—Elementary German (1) <i>four hours</i>	4	
Mathematics—Solid Geometry; <i>three hours</i> , and Plane Trigonometry (2); <i>two hours</i>	5	
Chemistry—General Chemistry (1); <i>three hours, one period</i>	4	
Botany—General Botany (1); <i>four hours</i>	4	
Drawing—Mechanical Drawing; <i>five hours</i>	2	
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1	
Hygiene—Physical Training for Women; <i>three hours</i>	1	

SOPHOMORE YEAR.

	First Semester.	3
English—English Literature (3); <i>three hours</i>	3	
German—Schiller's Jungfrau von Orleans and Prose Composition (2); <i>four hours</i>	4	
Mathematics—Spherical Trigonometry and Plane Analytical Geometry (2); <i>five hours</i>	5	
Physiology—Physiology and Hygiene (5); <i>four hours</i>	4	
Physics—Laboratory Physics (1); <i>two periods</i>	2	
Drawing—Advanced Freehand; <i>five hours</i>	2	
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1	
Hygiene—Physical Training for Women (1); <i>three hours</i>	1	

Second Semester.

English—English Literature (3); <i>three hours</i>	3	
German—Schiller's Wilhelm Tell and Maria Stuart (2); <i>four hours</i>	4	
Mathematics—Solid Analytical Geometry and Differential Calculus (4); <i>five hours</i>	5	
Botany—Systematic and Structural Botany (2); <i>four hours</i>	4	
Physics—Laboratory Physics (1); <i>two periods</i>	2	
Drawing—Descriptive Geometry; <i>three hours</i>	3	
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1	
Hygiene—Physical Training for Women (1); <i>three hours</i>	1	

NOTE: When German is offered for entrance credit, French will be taken.

THE SCHOOL OF GENERAL SCIENCE.

In the Junior and Senior years the student in this course is required to elect at least six hours of advanced work in subjects pursued in the Freshman and Sophomore years. It is practical for the student to specialize in almost any one of the subjects required in the Freshman or Sophomore years as a major subject, and to take minor subjects in other University Schools. This course gives special advantages to students preparing for the professions of medicine, dentistry and pharmacy.

JUNIOR YEAR.

First Semester.

	Credits.
English—English Composition, six themes (1b); one hour.....	1
Physics—Light and Heat (2); three hours.....	3
Military—Tactics; one hour. Drill; three hours.....	1
Hygiene—Physical Training for Women (1); three hours.....	1
Electives—From subjects offered, but with approval of Faculty Committee; fourteen hours minimum.....	14

Second Semester.

English—English Composition, six themes (1b); one hour.....	1
Physics—Electricity and Magnetism (3); three hours.....	3
Military—Tactics; one hour. Drill; three hours.....	1
Hygiene—Physical Training for Women (1); three hours.....	1
Electives—From subjects offered, but with approval of Faculty Committee; fourteen hours minimum.....	14

SENIOR YEAR.

First Semester.

English—English Composition, three forensics (1c); one hour.....	1
Economics—Principles of Economics (3); three hours.....	3
Military—Tactics; one hour. Drill; three hours.....	1
Hygiene—Physical Training for Women (1); three hours.....	1
Electives—From subjects offered, but with approval of Faculty Committee; fourteen hours minimum.....	14

Second Semester.

English—English Composition, three forensics (1c); one hour.....	1
Economics—Political Economy (4); three hours.....	3
Military—Tactics; one hour. Drill; three hours.....	1
Hygiene—Physical Training for Women (1); three hours.....	1
Electives—From subjects offered, but with approval of Faculty Committee; fourteen hours minimum.....	14

THE SCHOOL OF COMMERCE.

The School of Commerce is an experimental effort to give the student a broad yet somewhat technical training for business life. The modern languages, history, economics, geography, mathematics, shorthand, typewriting and bookkeeping are the leading subjects in this course.

The entrance requirements for this School are the same as for admission to the other University Schools and the University standard is maintained throughout the course. The Degree of Bachelor of Science is conferred upon those who complete this course.

FRESHMAN YEAR.

	Credits.
English—Literature (Course 2) and Composition (Course 1); <i>three hours</i>	3
German—Elementary German (1); <i>four hours</i>	4
Mathematics—College Algebra (1); <i>five hours</i>	5
History—Mediæval History (1); <i>three hours</i>	3
Commercial—Stenography or Accounting; <i>five hours</i>	5
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1
Hygiene—Physical Training for Women; <i>three hours</i>	1

Second Semester.

English—Literature (Course 2) and Composition (Course 1); <i>three hours</i>	3
German—Elementary German (1); <i>four hours</i>	4
Mathematics—Solid Geometry and Trigonometry (2); <i>five hours</i>	5
History—Mediæval History (1); <i>three hours</i>	3
Commercial—Stenography or Accounting; <i>five hours</i>	5
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1
Hygiene—Physical Training for Women; <i>three hours</i>	1

SOPHOMORE YEAR.

First Semester.

German—Schiller's Jungfrau von Orleans and Prose Composition (2); <i>four hours</i>	4
Chemistry—General Chemistry (1); <i>two hours, one period</i>	3
History—European History (2); <i>three hours</i>	3
Economics—Industrial Economics (3); <i>three hours</i>	3
Geography—Geography of Commerce; <i>two hours</i>	2
Commercial—Stenography or Accounting; <i>three hours</i>	3
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1
Hygiene—Physical Training for Women; <i>three hours</i>	1

Second Semester.

German—Schiller's Wilhelm Tell and Maria Stuart (2); <i>four hours</i>	4
Chemistry—General Chemistry (1); <i>two hours, one period</i>	3
History—European History (2); <i>three hours</i>	3
Economics—Industrial Economics (3); <i>three hours</i>	3
Geography—Geography of Commerce; <i>two hours</i>	2
Commercial—Stenography or Accounting; <i>three hours</i>	3
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1
Hygiene—Physical Training for Women; <i>three hours</i>	1

THE SCHOOL OF COMMERCE.

In addition to the subjects named in the Junior and Senior years, considerable reading and investigation in geography, history of commerce, and the political and economic conditions of the chief trading nations will be required.

JUNIOR YEAR.

	First Semester.	Credits.
German—Modern Prose Reading and Conversation (3); <i>three hours</i>	3	
French—Elementary French (6); <i>four hours</i>	4	
Chemistry—Organic Chemistry (5); <i>three hours</i>	3	
History—History of England (3); <i>two hours</i>	3	
Political Science—Municipal Law and Ethics; <i>three hours</i>	3	
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1	

Second Semester.

German—Modern Prose Reading and Conversation (3); <i>three hours</i>	3	
French—Elementary French (6); <i>four hours</i>	4	
Chemistry—Industrial Chemistry (7); <i>three hours</i>	3	
History—History of England (3); <i>two hours</i>	3	
Political Science—International Law and Ethics (2); <i>three hours</i>	3	
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1	

SENIOR YEAR.

	First Semester.	Credits.
French—Modern Prose and Prose Composition (7); <i>four hours</i>	4	
Spanish—Grammar and Prose Reading (9); <i>two hours</i>	2	
Economics—Principles of Economics (3); <i>three hours</i>	3	
Finance—Finance and Trade; <i>three hours</i>	3	
History—Political History of the United States (4); <i>three hours</i>	3	
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1	

Second Semester.

French—Modern Prose and Prose Composition (7); <i>four hours</i>	4	
Spanish—Prose Reading and Conversation (9); <i>two hours</i>	2	
Economics—Political Economy (4); <i>three hours</i>	3	
Finance—Finance and Trade; <i>three hours</i>	3	
History—Political History of the United States (4); <i>three hours</i>	3	
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1	

III. THE COLLEGE OF APPLIED SCIENCE.

The College of Applied Science comprises three technical schools, as follows:

(1) The School of Mines, which covers a strong theoretical and practical course in Mining and Metallurgy, and leads to the Degree of Bachelor of Science.

(2) The School of Civil Engineering, which gives theoretical and practical training in General Engineering, and leads to the Degree of Bachelor of Science.

(3) The School of Mechanical Engineering, which aims to give very complete training in Mechanical Engineering and Practical Mechanics, and leads to the Degree of Bachelor of Science.

THE SCHOOL OF MINES.

FRESHMAN YEAR.

	Credits.
English—Literature (2) and Composition (1a); <i>three hours</i>	3
French—Elementary French (6); <i>four hours</i>	4
Mathematics—College Algebra (1); <i>five hours</i>	5
Chemistry—General Chemistry (1); <i>three hours, one period</i>	4
Mechanics—Carpentry and Joinery (1); <i>two periods</i>	2
Drawing—Freehand Drawing (3); <i>five hours</i>	2
Military—Tactics; <i>one hour. Drill; three hours</i>	1

Second Semester.

English—Literature (2) and Composition (1a); <i>three hours</i>	3
French—Elementary French (6); <i>four hours</i>	4
Mathematics—Solid Geometry and Plane Trigonometry (2); <i>five hours</i>	5
Chemistry—General Chemistry (1); <i>three hours. Qualitative Analysis (3); three periods</i>	6
Mechanics—Wood and Iron Work (2); <i>two periods</i>	2
Drawing—Mechanical Drawing (3); <i>five hours</i>	2
Military—Tactics; <i>one hour. Drill; three hours</i>	1

SOPHOMORE YEAR.

First Semester.

Mathematics—Spherical Trigonometry and Plane Analytic Geometry (3); <i>five hours</i>	5
Chemistry—Quantitative Analysis (4); <i>three periods</i>	3
Mineralogy—Descriptive and Determinative Mineralogy (1); <i>two periods</i>	2
Physics—Laboratory Physics (1); <i>two periods</i>	2
Mechanics—Shop Work (3); <i>two periods</i>	2
French—Modern Prose and Composition (7); <i>four hours</i>	4
Drawing—Advanced Freehand Drawing (2); <i>five hours</i>	2
Military—Tactics; <i>one hour. Drill; three hours</i>	1

Second Semester.

Mathematics—Solid Analytic Geometry (3) and Differential Calculus (4); <i>five hours</i>	5
Chemistry—Quantitative Analysis (4); <i>three periods</i>	3
Mineralogy—Determinative Mineralogy (1), Blowpipe Analysis (1); <i>two periods</i>	2
Physics—Laboratory Physics (1); <i>two periods</i>	2
Mechanics—Shop Work (3); <i>two periods</i>	2
French—Modern Prose and Composition (7); <i>four hours</i>	4
Drawing—Descriptive Geometry; <i>three hours</i>	3
Military—Tactics; <i>one hour. Drill; three hours</i>	1

THE SCHOOL OF MINES.

This school gives a good preliminary training to students who intend to follow as a profession mining or metallurgy. Upon completing the four years' course the student will be proficient in assaying and surveying and well grounded in mining and metallurgy. The laboratories are well equipped, and one of the principal features of the course is that a great deal of laboratory practice is required, for it can hardly be denied that the success of a professional man is not so much dependent upon the amount that he learns in college as it is upon the thoroughness of his knowledge of the subjects undertaken.

JUNIOR YEAR.

	First Semester.	Credits.
Engineering—Surveying (1): Class, <i>three hours</i> ; Field, <i>two periods</i>	5	
Assaying—Assaying (2); <i>one hour, one period</i>	2	
Metallurgy—General Metallurgy (1); <i>one hour</i>	1	
Mathematics—Integral Calculus (4) and Mechanics (6); <i>five hours</i>	5	
Geology—Dynamic and Structural Geology (2); <i>three hours</i>	3	
Physics—Heat and Light (2); <i>three hours</i>	3	
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1	

Second Semester.

Engineering—Surveying (1): Class, <i>three hours</i> ; Field, <i>two periods</i>	5	
Assaying—Assaying (2); <i>two periods</i>	2	
Metallurgy—General Metallurgy (1); <i>two hours</i>	2	
Mathematics—Analytical Mechanics (6); <i>three hours</i>	3	
Geology—Petrography (3) and Field Excursions (5); <i>two hours, one period</i>	3	
Physics—Electricity and Magnetism (3); <i>three hours</i>	3	
Drawing—Graphic Statics; <i>one period</i>	1	
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1	

SENIOR YEAR.

First Semester.

Mining—Prospecting, development, drainage and ventilation of Mines, blasting, mining machinery and mining laws; Visit to mines (5); <i>five hours</i>	5	
Metallurgy—Gold and Silver (4a); <i>four hours, three periods</i>	7	
Mechanics—Applied Mechanics, Strength of Materials (8); <i>five hours</i>	5	
Geology—Historical and Determinative Geology (6); <i>two hours, one period</i>	3	
Spanish—Short Course in Spanish (9); <i>two hours</i>	2	
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1	

Second Semester.

Mining—Continuation of above, and General Engineering (5); <i>five hours</i>	5	
Metallurgy—Copper, Lead and Zinc (4b); <i>four hours, three periods</i>	7	
Mechanics—Mechanics and Thermodynamics (9); <i>five hours</i>	5	
Geology—Economic Geology (7); <i>three hours</i>	3	
Spanish—Short Course in Spanish (9); <i>two hours</i>	2	
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1	

THE SCHOOL OF CIVIL ENGINEERING.

The course in Civil Engineering aims to combine strong theoretical training and as much professional practice as possible. While the adaptation of theory to practice can be thoroughly learned only by experience, there are many matters in which the routine work of engineering may be carried out in a technical school. The subjects of mathematics, surveying, physics, chemistry, geology, mechanics, drawing, graphostatics, are treated with special reference to the major subject of Civil Engineering.

FRESHMAN YEAR.

	Credits.
<i>First Semester.</i>	
English—Literature (2) and Composition (1a); <i>three hours</i> -----	3
French—Elementary French (6); <i>four hours</i> -----	4
Mathematics—College Algebra (1); <i>five hours</i> -----	5
Chemistry—General Chemistry (1); <i>three hours, one period</i> -----	4
Mechanics—Carpentry and Joinery (1); <i>two periods</i> -----	2
Drawing—Freehand Drawing (3); <i>five hours</i> -----	2
Military—Tactics; <i>one hour. Drill; three hours</i> -----	1

Second Semester.

English—Literature (2) and Composition (1a); <i>three hours</i> -----	3
French—Elementary French (6); <i>four hours</i> -----	4
Mathematics—Solid Geometry and Plane Trigonometry (2); <i>five hours</i> -----	5
Chemistry—General Chemistry (1); <i>three hours. Qualitative Analysis (3); three periods</i> -----	6
Mechanics—Work in Wood and Iron (2); <i>two periods</i> -----	2
Drawing—Mechanical Drawing (3); <i>five hours</i> -----	2
Military—Tactics; <i>one hour. Drill; three hours</i> -----	1

SOPHOMORE YEAR.

<i>First Semester.</i>	
French—Modern Prose and Composition (7); <i>four hours</i> -----	4
Mathematics—Spherical Trigonometry (2), Plane Analytical Geometry (3); <i>five hours</i> -----	5
Mineralogy—Descriptive and Determinative Mineralogy (1); <i>two periods</i> -----	2
Drawing—Advanced Freehand Drawing (2); <i>five hours</i> -----	2
Mechanics—Shop Work (3); <i>two periods</i> -----	2
Physics—Laboratory Physics (1); <i>two periods</i> -----	2
Military—Tactics; <i>one hour. Drill; three hours</i> -----	1

Second Semester.

French—Modern Prose and Composition (7); <i>four hours</i> -----	4
Mathematics—Solid Analytical Geometry (3), Differential Calculus (4); <i>five hours</i> -----	5
Mineralogy—Determinative Mineralogy (1), Blowpipe Analysis (1); <i>two periods</i> -----	2
Drawing—Descriptive Geometry; <i>three hours</i> -----	3
Drawing—Elementary Machine Design; <i>three hours</i> -----	3
Mechanics—Shop Work (3); <i>two periods</i> -----	2
Physics—Laboratory Physics (1); <i>two periods</i> -----	2
Military—Tactics; <i>one hour. Drill; three hours</i> -----	1

THE SCHOOL OF CIVIL ENGINEERING.

The University has recently made valuable additions to the equipment of the Department of Civil Engineering. Two transits of the latest and best type have been put in service. Twenty-four drawing tables of the latest pattern have been placed in the engineering rooms for the exclusive use of students in the Engineering Schools.

The Department of Geology and Mineralogy has been strengthened by the fitting up of new rooms expressly for the use of this Department and by the purchase of considerable new apparatus and machinery.

JUNIOR YEAR.

First Semester.

	Credits.
Mathematics—Integral Calculus (1) and Mechanics (6); <i>five hours</i>	5
Engineering—Surveying (1): <i>Class, three hours; Field, two periods</i>	5
Geology—Dynamic and Structural Geology (2); <i>three hours</i>	3
Physics—Heat and Light (2); <i>three hours</i>	3
Political Science—Municipal Law and Ethics (1); <i>three hours</i>	3
Drawing—Map Drawing; <i>two periods</i>	2
Military—Tactics; <i>one hour. Drill; three hours</i>	1

Second Semester.

Mechanics—Analytical Mechanics (6); <i>three hours</i>	3
Engineering—Surveying (1): <i>Class, three hours; Field, two periods</i>	5
Geology—Petrography (3) and Field Excursions (5); <i>two hours, one period</i>	3
Physics—Electricity and Magnetism (3); <i>three hours</i>	3
Political Science—International Law and Ethics (2); <i>three hours</i>	3
Drawing—Graphic Statics; <i>one period</i>	1
Military—Tactics; <i>one hour. Drill; three hours</i>	1

SENIOR YEAR.

First Semester.

Mechanics—Applied Mechanics (6); Strength of Materials (8); <i>five hours</i>	5
Engineering—General Engineering (2); <i>five hours</i>	5
Geology—Historical and Determinative Geology (6); <i>two hours, one period</i>	3
Political Science—Elements of Economics; <i>three hours</i>	3
Spanish—A Short Course in Spanish (9); <i>two hours</i>	2
Military—Tactics; <i>one hour. Drill; three hours</i>	1

Second Semester.

Mechanics—Mechanics and Thermodynamics (9); <i>five hours</i>	5
Engineering—Engineering Structures (3); <i>five hours</i>	5
Astronomy—Mathematical Astronomy (5); <i>two hours</i>	2
Geology—Economic Geology (7); <i>three hours</i>	3
Economics—Political Economy (4); <i>three hours</i>	3
Spanish—A Short Course in Spanish (9); <i>two hours</i>	2
Military—Tactics; <i>one hour. Drill; three hours</i>	1

THE SCHOOL OF MECHANICAL ENGINEERING.

The object of instruction in the School of Mechanical Engineering is to give young men sufficient theoretical and practical knowledge to enable them to superintend the designing, construction and erection of improved machinery, and in general to hold positions of responsibility and trust in the field of engineering. It cannot be doubted that the number of educated engineers employed in large manufacturing establishments increases each year, and that more reliance is placed on scientific calculations and deductions in mechanical design than at any time in the past. The course in Mechanical Engineering is broad and effective, though its specialization implies more or less of professional training and preparation, yet the discipline and knowledge gained from the study of principles, together with their constant application in practice, is well suited to all who may be brought face to face with the practical problems of life.

FRESHMAN YEAR.

	Credits.
English—Literature (2) and Composition (1a); <i>three hours</i>	3
French—Elementary French (6); <i>four hours</i>	4
Mathematics—College Algebra (1); <i>five hours</i>	5
Chemistry—General Chemistry (1); <i>three hours, one period</i>	4
Mechanics—Carpentry and Joinery (1); <i>two periods</i>	2
Drawing—Freehand Drawing (3); <i>five hours</i>	2
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1

Second Semester.

English—Literature (2) and Composition (1a); <i>three hours</i>	3
French—Elementary French (6); <i>four hours</i>	4
Mathematics—Solid Geometry and Plane Trigonometry (2); <i>five hours</i>	5
Chemistry—General Chemistry (1); <i>three hours</i> . Qualitative Analysis (3); <i>three periods</i>	6
Mechanics—Work in Wood and Iron (2); <i>two periods</i>	2
Drawing—Mechanical Drawing (3); <i>five hours</i>	2
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1

SOPHOMORE YEAR.

	4
French—Modern Prose and Composition (7); <i>four hours</i>	4
Mathematics—Spherical Trigonometry (2), Plane Analytical Geometry (3); <i>five hours</i>	5
Drawing—Advanced Freehand Drawing (2); <i>five hours</i>	5
Mechanics—Shop Work (3); <i>four periods</i>	4
Physics—Laboratory Physics (1); <i>two periods</i>	2
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1

Second Semester.

French—Modern Prose and Composition (7); <i>four hours</i>	4
Mathematics—Solid Analytical Geometry (3), Differential Calculus (4); <i>five hours</i>	5
Drawing—Descriptive Geometry; <i>three hours</i>	3
Drawing—Elementary Machine Design; <i>three hours</i>	3
Mechanics—Shop Work (3); <i>four periods</i>	4
Physics—Laboratory Physics (1); <i>two periods</i>	2
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1

THE SCHOOL OF MECHANICAL ENGINEERING.

The first two years of this course are devoted to Drawing, Modern Languages, Mathematics and Chemistry, together with practical training in the Wood Shop, Forge Shop and the Machine Shop. During the Junior and Senior years the studies are almost purely technical in their character and may be broadly classified under the heads of Mechanics, Machine Design, Measurement of Power, Steam Engineering and practical work in Experimental Engineering.

Since September, 1899, the following equipment has been added: To the Wood Shop, one tilt-table jig-saw, one wood trimmer, and a few small tools. To the Machine Shop, one milling machine, one universal grinder, one sensitive drill, one wet emery wheel, one center grinder, and a few small tools for the Forge Shop. To the Drafting room has been added a fair equipment of mathematical and drawing instruments.

JUNIOR YEAR.

	Credits.
Mathematics—Integral Calculus (4) and Mechanics (6); <i>five hours</i>	5
Engineering—Surveying (1); Class, <i>three hours</i> ; Field, <i>two periods</i>	5
Mechanics—Kinematics; <i>five hours</i>	5
Physics—Heat and Light (2); <i>three hours</i>	3
Metallurgy—General Metallurgy (1); <i>one hour</i>	1
Drawing—Mechanical Drawing and Design; <i>three hours, one period</i>	3
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1

Second Semester.

Mechanics—Analytical Mechanics (6); <i>three hours</i>	3
Engineering—Experimental Engineering; <i>two periods</i>	2
Engineering—Theory of Steam Boilers; <i>five hours</i>	5
Physics—Electricity and Magnetism (3); <i>five hours</i>	5
Metallurgy—General Metallurgy (1); <i>two hours</i>	2
Drawing—Graphic Statics; <i>one period</i>	1
Drawing—Steam Boiler Design; <i>four periods</i>	4
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1

SENIOR YEAR.

	Credits.
Mechanics—Applied Mechanics (6), Strength of Materials (8); <i>five hours</i>	5
Steam Engine—Theory of Steam Engine; <i>five hours</i>	5
Engineering—Theory of Valve Gears (8), Dynamometers and Measurement of Power (6); <i>four hours</i>	4
Machine Design—Theory of Machine Design (5); <i>five hours</i>	5
Drawing—Advanced Machine Design; <i>one period</i>	1
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1

Second Semester.

Mechanics—Mechanics and Thermodynamics (9); <i>five hours</i>	5
Engineering—Experimental Engineering; <i>three periods</i>	3
Engineering—Steam Engine Design (5); <i>three hours</i>	5
Engineering—Mechanical Engineering of Power Plants; <i>two hours</i>	2
Economics—Political Economy (4); <i>three hours</i>	3
Drawing—Valve and Governor Design; <i>four periods</i>	4
Thesis Work—Thesis Work (9); <i>two periods</i>	2
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1

STATE NORMAL SCHOOL.

The State Normal School offers advanced courses of instruction, both professional and liberal, for students who wish to become teachers in the Grammar and High Schools of Nevada and other States.

The State Normal School is organized as the Department of Education of the State University and provides adequately for the professional training of teachers. Upon a foundation of exact and thorough discipline in all the subjects taught in the public schools is based the professional preparation—theoretical, historical and practical—in the science and art of teaching. As a department of the State University it is possessed of the advantages offered by the well-equipped laboratories and the library and by the strong staff of specialists who compose the University Faculty.

UNIVERSITY AIMS.

The aims of the University in providing instruction in the Science and Art of Teaching are as follows:

1. To fit University students for the higher position in the public school service.
2. To promote the study of educational science.
3. To teach the history of education, and of educational systems and doctrines.
4. To secure to teaching the rights and advantages of a profession.
5. To give unity to our State educational system.

CONDITIONS OF ADMISSION.

1. Applicants for admission to any of the classes in the Normal School must be at least fifteen years of age, and must have a good moral character.
2. Applicants holding any one of the following credentials may be admitted to the First year without examination:
 - a. A teacher's certificate of grammar grade, which includes two years' Latin.
 - b. A certificate of promotion from the eleventh year of any public school of standard grade, which includes two years' Latin.
 - c. Applicants from other States and Territories may be admitted on the same terms and conditions as those given to residents of Nevada.
3. Graduates from any of the Affiliated High Schools of the State will be admitted to the Freshman year upon the presentation of their diploma and a letter of recommendation from the principal of the high school.
4. At the beginning of the year applicants holding none of the above credentials will be admitted upon examination.

THE NORMAL SCHOOL DIPLOMA.

By the provisions of the State school law, the diploma of the Normal School is accepted as evidence of qualification to teach in any school of the State.

GENERAL REQUIREMENTS.

The standard of student work in the Normal School is intended to be high, and the requirements for passing all subjects with credit will be maintained in all cases. The State is liberal in her provisions for the training of teachers and has a right to the best possible preparation on the part of those who wish to teach in her public schools.

TRAINING SCHOOL.

The Reno public schools give the Normal students ample opportunity to apply practically their professional training.

By arrangements between the Regents of the State University and the Trustees of the Reno Public Schools, also with the cordial co-operation of the Principal and teachers, the practice teaching and schoolroom training of the Normal students are accomplished in the several grades of a well-organized and carefully graded public school.

STATE NORMAL SCHOOL.

NORMAL GRADE.

(Leading to Grammar School Diploma and State Certificate of Grammar Grade.)

Graduates from the State Normal School, Normal Grade, may enter the Junior year of the College of Arts and Science.

LATIN COURSE.

FIRST YEAR.

	<i>First Semester.</i>	<i>Credits.</i>
Pedagogics—Lectures on Teaching and Normal Methods (1); <i>two hours</i>	2	
English—English Literature; <i>three hours</i>	3	
English—Composition and Spelling; <i>one hour</i>	1	
Mathematics—Plane Geometry; <i>three hours</i>	3	
History—United States History and Civics; <i>five hours</i>	5	
Latin—Cicero and Vergil, Ovid, Vergil's Bucolics (1); <i>four hours</i>	4	
Physics—Elements of Physics, with laboratory practice; <i>five hours</i>	5	
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1	

Second Semester.

Pedagogics—Lectures on Teaching and Normal Methods (2); <i>two hours</i>	2
English—English Literature; <i>three hours</i>	2
English—Composition and Spelling; <i>one hour</i>	1
Mathematics—Plane Geometry; <i>three hours</i>	3
History—United States History and Civics; <i>five hours</i>	5
Latin—Ovid, Vergil's Bucolics (1); <i>four hours</i>	4
Physics—Elements of Physics, with laboratory practice; <i>five hours</i>	5
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1

THE FRESHMAN NORMAL YEAR.

First Semester.

Pedagogics—School Management and Practice (3); <i>two hours</i>	2
English—Literature (1) and Composition (1a); <i>three hours</i>	3
Latin—Vergil's <i>Aeneid</i> , Mythology (1); <i>five hours</i>	5
Mathematics—College Algebra (1); <i>five hours</i>	5
History—Medieval History (1); <i>three hours</i>	3
Physiology—Physiology and Hygiene; <i>four hours</i>	4
Music—Vocal Music; <i>two hours</i>	2
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1
Hygiene—Physical Training for Women (1); <i>three hours</i>	1

Second Semester.

Pedagogics—Schoolroom Practice (3); <i>two hours</i>	2
English—Literature (1) and Composition (1a); <i>three hours</i>	3
Latin—Vergil's <i>Aeneid</i> (2); <i>five hours</i>	5
Mathematics—Solid Geometry; <i>three hours</i> , and Trigonometry (2); <i>two hours</i>	5
History—Medieval History (1); <i>three hours</i>	3
Botany—General Botany; <i>four hours</i>	4
Music—Vocal Music; <i>two hours</i>	2
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1
Hygiene—Physical Training for Women (1); <i>three hours</i>	1

NATURE STUDY.

Twelve lectures and field exercises within the year. These are given on alternate Saturday mornings in months of September, October, November, March, April and May.

THE SENIOR NORMAL YEAR.

FROM STATE SCHOOL LAWS.

1. Upon the recommendation of the President of the University, the Board of Regents shall issue to those who worthily complete the full course of study prescribed in the Nevada State Normal School, a department of the State University, a diploma of graduation, and said diploma shall bear the heading, "The Nevada State Normal School," and to all persons receiving this diploma, the State Board of Education shall issue a State certificate of the Grammar grade, good for five years. To the holders of the above State certificates of the Grammar grade, the State Board of Education shall grant a life diploma when said graduates of the Nevada State Normal School shall have completed at least forty-five months of successful instruction in the public schools of this or of any other State.

2. The Board of Regents may require said Normal School graduates, before granting the diploma herein provided for, to sign the following obligation: "I hereby agree to report to the President of the University by letter at least twice a year for three years after my graduation, and once a year thereafter, so long as I continue in the profession of teaching, and when I shall leave the profession I will report the fact to him, with the cause therefor. A failure to make such reports may be considered sufficient cause for the revocation of my diploma."

LATIN COURSE.

First Semester.

	Credits.
Pedagogics—History of Education (5); <i>three hours</i> . Schoolroom Practice (3); <i>two hours</i> -----	5
English—Composition, six themes (1b); <i>one hour</i> -----	1
History—European History (2); <i>three hours</i> -----	3
Mathematics—Arithmetic; <i>two hours</i> -----	2
Psychology—Physiological Psychology (6); <i>three hours</i> -----	3
Chemistry—General Chemistry (1); <i>three hours</i> -----	3
Music—Vocal Music; <i>two hours</i> -----	2
Hygiene—Physical Training for Women (1); <i>three hours</i> -----	1

Second Semester.

Pedagogics—Philosophy of Education (5); <i>three hours</i> . Schoolroom Practice (3); <i>two hours</i> -----	5
English—Composition, six themes (1b); <i>one hour</i> -----	1
History—European History (2); <i>three hours</i> -----	3
Mathematics—Arithmetic (9); <i>two hours</i> -----	2
Psychology—General Psychology (7); <i>three hours</i> -----	3
Chemistry—General Chemistry (1); <i>three hours</i> -----	3
Music—Vocal Music; <i>two hours</i> -----	2
Hygiene—Physical Training for Women (1); <i>three hours</i> -----	1

NATURE STUDY.

Twelve lectures and field exercises within the year. These are given on alternate Saturday mornings within the months of September, October, November, March, April and May.

NORMAL GRADE.

(Leading to Grammar School Diploma and State Certificate of Grammar Grade.)

Graduates from the State Normal School, Normal Grade, may enter the Junior year of the College of Arts and Science.

SCIENCE COURSE.

FIRST YEAR.

	Credits.
Pedagogics—Lectures on Teaching and Normal Methods; <i>two hours</i>	2
English—English Literature; <i>three hours</i>	3
English—Composition and Spelling; <i>one hour</i>	1
Mathematics—Plane Geometry; <i>three hours</i>	3
History—United States History and Civics; <i>five hours</i>	5
Physics—Elements of Physics, with laboratory practice; <i>five hours</i>	5
German—Reading and Composition; <i>four hours</i>	4
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1

Second Semester.

Pedagogics—Lectures on Teaching and Normal Methods; <i>two hours</i>	2
English—English Literature; <i>three hours</i>	3
English—Composition and Spelling; <i>one hour</i>	1
Mathematics—Plane Geometry; <i>three hours</i>	3
History—United States History and Civics; <i>five hours</i>	5
Physics—Elements of Physics, with laboratory practice; <i>five hours</i>	5
German—Reading and Composition; <i>four hours</i>	4
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1

THE FRESHMAN NORMAL YEAR.

SCIENCE COURSE.

First Semester.

Pedagogics—School Management and Practice; <i>two hours</i>	2
English—Literature (2) and Composition (1a); <i>three hours</i>	2
German—Schiller's Jungfrau von Orleans and Prose Composition (2); <i>four hours</i>	4
Mathematics—College Algebra (1); <i>five hours</i>	5
Zoölogy—General Zoölogy (1); <i>four hours</i>	4
Hygiene—Physiology and Hygiene; <i>four hours</i>	4
Hygiene—Physical Training for Women (1); <i>three hours</i>	1
Music—Vocal Music; <i>two hours</i>	2
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1

Second Semester.

Pedagogics—Schoolroom Practice; <i>two hours</i>	2
English—Literature (2) and Composition (1); <i>three hours</i>	3
German—Schiller's Wilhelm Tell and Maria Stuart (2); <i>four hours</i>	4
Mathematics—Solid Geometry; <i>three hours</i> . Plane Trigonometry (2); <i>two hours</i>	5
Botany—General Botany (1); <i>four hours</i>	4
Hygiene—Physical Training for Women (1); <i>three hours</i>	1
Music—Vocal Music; <i>two hours</i>	2
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1

NATURE STUDY.

Twelve lectures and field exercises within the year. These are given on alternate Sunday mornings in months of September, October, November, March, April and May.

THE SENIOR NORMAL YEAR.

The course of study in the State Normal School, Normal Grade, covers a period of three years, and is equivalent to the third year of the University High School and of the Freshman and Sophomore years of the College of Arts and Science. The Science Course differs from the Latin Course in that it substitutes Zoölogy and Botany for History, and German for Latin. The object of the Science Course is to give teachers whose tastes lead them to the study of science, the advantages of special training for the teaching of science in the public schools.

SCIENCE COURSE.

	First Semester.	Credits.
Pedagogics—History of Education; <i>three hours.</i> Schoolroom Practice; <i>two hours.</i>	5	
English—Composition, six themes (1b); <i>one hour</i>	1	
Mathematics—Arithmetic; <i>two hours</i>	2	
Psychology—Physiological Psychology (6); <i>three hours</i>	3	
Chemistry—General Chemistry (1); <i>two hours, one period</i>	3	
Physics—Laboratory Physics (1); <i>two periods</i>	2	
Music—Vocal Music; <i>two hours</i>	2	
Bookkeeping—Bookkeeping (1); <i>one period</i>	1	
Military—Tactics; <i>one hour.</i> Drill; <i>three hours</i>	1	
Hygiene—Physical Training for Women (1); <i>three hours</i>	1	

Second Semester.

Pedagogics—Philosophy of Education; <i>three hours.</i> Schoolroom Practice; <i>two hours</i>	5	
English—Composition, six themes (1b); <i>one hour</i>	1	
Mathematics—Arithmetic; <i>two hours</i>	2	
Psychology—General Psychology (7); <i>three hours</i>	3	
Botany—Structural and Systematic Botany (2); <i>four hours</i>	4	
Chemistry—General Chemistry (1); <i>two hours, one period</i>	3	
Physics—Laboratory Physics (1); <i>two periods</i>	2	
Music—Vocal Music; <i>two hours</i>	2	
Bookkeeping—Bookkeeping (1); <i>one period</i>	1	
Military—Tactics; <i>one hour.</i> Drill; <i>three hours</i>	1	
Hygiene—Physical Training for Women (1); <i>three hours</i>	1	

NATURE STUDY.

Twelve lectures and field excursions within the year. These are given on alternate Saturday mornings in months of September, October, November, March, April and May.

LATIN COURSE.

(Leading to High School Diploma and State Certificate of High School Grade and also to the Degree of B.A.)

COLLEGE GRADE.

1. The Normal School, College Grade, offers a strictly College Course of four years and is the equivalent of the courses of study offered in the College of Arts and Science. Twelve hours of professional study and research and eight laboratory hours of practice teaching in the Reno Public Schools are required. A State high school certificate is given by the State Board of Education to graduates from the four years' course of the State Normal School.

2. Students in the Normal School, College Grade, may matriculate also in the College of Arts and Science and receive the degree of Bachelor of Arts or Bachelor of Science at graduation.

3. In the Junior and Senior years each student is required to elect at least six hours of advanced work in subjects pursued in Freshman and Sophomore years.

JUNIOR YEAR.

	Credits.
English—Composition, six themes (1b); <i>one hour</i>	1
Political Science—Municipal Law and Ethics (1); <i>three hours</i>	3
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1
Hygiene—Physical Training for Women (2); <i>three hours</i>	1
Electives—From subjects offered in any School, but with approval of Faculty Committee; <i>fourteen hours minimum</i>	14

Second Semester.

English—Composition, six themes (1b); <i>one hour</i>	1
Political Science—International Law and Ethics (2); <i>three hours</i>	3
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1
Hygiene—Physical Training for Women (2); <i>three hours</i>	1
Electives—From subjects offered in any School, but with approval of Faculty Committee; <i>fourteen hours minimum</i>	14

SENIOR YEAR.

	Credits.
English—Composition, three forensics (1c); <i>one hour</i>	1
Political Science—Elements of Economics; <i>three hours</i>	3
Military—Tactics; <i>one hour</i> , Drill; <i>three hours</i>	1
Hygiene—Physical Training for Women (2); <i>three hours</i>	1
Electives—From subjects offered in any School, but with approval of Faculty Committee; <i>fourteen hours minimum</i>	14

Second Semester.

English—Composition, three forensics (1c); <i>one hour</i>	1
Economics—Political Economy (4); <i>three hours</i>	3
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i>	1
Hygiene—Physical Training for Women (2); <i>three hours</i>	1
Electives—From subjects offered in any School, but with approval of Faculty Committee; <i>fourteen hours minimum</i>	14

SCIENCE COURSE.

COLLEGE GRADE.

1. The Normal School, College Grade, offers a course of study equivalent to the four years' course in the College of Arts and Science. Twelve hours of professional study and research and eight laboratory hours of practice teaching in the Reno Public Schools are required.
2. Students in the State Normal School, College Grade, may matriculate also in the College of Arts and Science and receive the Degree of Bachelor of Arts or Bachelor of Science at graduation.
3. In the Junior and Senior years each student is required to elect at least six hours of advanced work in subjects pursued in Freshman and Sophomore years.

SCIENCE COURSE.

(Leading to High School Diploma and State Certificate of High School grade and also to the Degree of B.S.)

JUNIOR YEAR.

	Credits.
First Semester.	
English—Composition, six themes (1b); <i>one hour</i> -----	1
Physics—Light and Heat (2); <i>three hours</i> -----	3
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i> -----	1
Hygiene—Physical Training for Women (2); <i>three hours</i> -----	1
Electives—From subjects offered, but with approval of Faculty Committee; <i>fourteen hours minimum</i> -----	14

Second Semester.

English—Composition, six themes (1b); <i>one hour</i> -----	1
Physics—Electricity and Magnetism (3); <i>three hours</i> -----	3
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i> -----	1
Hygiene—Physical Training for Women (2); <i>three hours</i> -----	1
Electives—From subjects offered, but with approval of Faculty Committee; <i>fourteen hours minimum</i> -----	14

SENIOR YEAR.

First Semester.	
English—Composition, three forensics (1c); <i>one hour</i> -----	1
Political Science—Elements of Economics; <i>three hours</i> -----	3
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i> -----	1
Hygiene—Physical Training for Women (2); <i>three hours</i> -----	1
Electives—From subjects offered, but with approval of Faculty Committee; <i>fourteen hours minimum</i> -----	14

Second Semester.

English—Composition, three forensics (1c); <i>one hour</i> -----	1
Economics—Political Economy (4); <i>three hours</i> -----	3
Military—Tactics; <i>one hour</i> . Drill; <i>three hours</i> -----	1
Hygiene—Physical Training for Women (2); <i>three hours</i> -----	1
Electives—From subjects offered, but with approval of Faculty Committee; <i>fourteen hours minimum</i> -----	14

UNIVERSITY COURSES OF INSTRUCTION.

ORDER OF SUBJECTS.

I. Agricultural Science.	XIII. Hygiene and Physical Training for Young Women.
II. Art and Science of Education.	XIV. Latin Language and Literature.
III. Biological Science.	XV. Law and Economics.
IV. Botany and Horticulture.	XVI. Mathematics and Mechanics.
V. Chemistry.	XVII. Mechanical Engineering.
VI. Domestic Arts and Science.	XVIII. Mechanic Arts.
VII. English Language and Literature.	XIX. Drawing.
VIII. Entomology.	XX. Metallurgy and Assaying.
IX. Geology and Mineralogy.	XXI. Military Science.
X. Greek Language and Literature.	XXII. Mining and Civil Engineering.
XI. History and Political Science.	XXIII. Modern Languages.
XII. History of Art.	XXIV. Physics.

I. AGRICULTURAL SCIENCE.

PROFESSOR McDOWELL, PROFESSOR WILSON AND DOCTOR KENNEDY.

1. Agriculture.

5 hrs., both terms. Junior.

In this course the following topics are considered: Brief historical outline; comparison of ancient and modern methods; value of the farm plant of the United States; selection of farming land; farm implements and machinery; preparation of soil for crops; cultivation, harvesting and sale of crops; drainage; management of teams. PROFESSOR McDOWELL.

2. Agriculture.

5 hrs., both terms. Senior.

Farm accounts, employment and management of labor; soils; irrigation; farm buildings; mixed farming; rotation of crops; silos; breeds of live stock; stock feeding. PROFESSOR McDOWELL.

3. Forestry.

3 hrs., first term. Senior.

Importance of the subject of forestry; rank and value of forest products; effects of deforestation; forest supply; Government timber land; what and how to plant; revenue from forest areas; what forestry management is and what it is not. Lectures, with liberal reading of subject literature. PROFESSOR McDOWELL.

4. Elements of Veterinary Science.

5 hrs., first term. Senior.

The purpose is to give the student such practical instruction as will enable him to treat all ordinary diseases and accidents to which the domestic animals are liable. PROFESSOR McDOWELL.

5. Chemistry of Soils, etc.

4 hrs., both terms. Junior.

Lectures (2) and laboratory practice (2) upon the quantitative analysis of soils, fertilizers, agricultural products, etc., how plants grow, mineral basis of soil, chemical effect of tillage, feeding stuffs, etc. Johnson: How Crops Grow and How Crops Feed. PROFESSOR WILSON.

6. The Dairy.

3 hrs., second term. Senior.

The instruction consists of lectures upon the formation and composition of milk; ferments and their action; testing for purity and value; methods of manufacture of cheese and butter. The lectures are supplemented by practical work with different testing apparatus, and by the inspection of dairies and creameries fitted with modern apparatus. PROFESSOR WILSON.

7. Horticulture.*5 hrs., second term. Sophomore.*

The course will include lectures on fruit-growing, vegetable gardening, the propagation of plants, the making of lawns, ornamental shrubs, and the beautifying of home and farm grounds. DR. KENNEDY.

8. Economic Botany.*4 hrs., second term. Junior.*

A study of the history and evolution of the most important economic plants. Fungus diseases of cultivated plants and their remedies. Required in the School of Agriculture. DR. KENNEDY.

9. Field Practice.*All Classes.*

Freshman; Instruction in teams and implements, 2 hours per week, September and October. Sophomore; Instruction in Seeding and Hot-beds, 2 hours per week, April and May. Junior; Instruction in Dynamometer, 2 hours per week, September and October. Senior; Instruction in Grafting and Tree-trimming, 2 hours per week, April.

10. Nomenclature.

Under the head of Agriculture, the following technical nomenclature for the various subjects has been approved by the American Association of Agricultural Colleges. (1) Agronomy—Climate, soils, tillage, drainage, irrigation, fertilizers, plant production, farm crops; (2) Zoötechny—Principles of breeding, breeds of live stock, stock-feeding; (3) Agrotechny—Butter-making, cheese-making, beet-sugar production; (4) Rural Engineering—Roads, drains, irrigation system, farm buildings and machinery; (5) Rural Economics—History of Agriculture, farm management, rural law, farm accounts.

11. Nature Study.

This course is given semi-monthly during September, October and November of the first semester and March, April and May of the second semester. It has for its object the instruction of teachers and others in the best methods of teaching Nature Study. The course has in view the advancement of the agricultural interest of the State by developing a love for and a knowledge of plants and animals in the hearts and minds of Nevada school children. The happiness and welfare of the rural classes can be greatly enhanced by giving them a knowledge of the common things which surround them in everyday life. Required of all Freshman and Senior Normals. DR. KENNEDY, PROFESSOR FRANDSEN, MR. DOTEN.

II. ART AND SCIENCE OF EDUCATION.

PROFESSOR EMERY AND PROFESSOR FRANDSEN.

1. Elements of Pedagogy.*2 hrs., first term, first year.*

The work of this course consists of lectures, discussions and reproductions of the essential points upon the following topics: The teacher: professional training, aims, equipments and personality. The pupil: mental, moral and physical traits, habits of study and obedience, character building. The school organization: course of study, programme of recitation, management, discipline; moral suasion and force, their relative values and interdependence. *Fitch: Theory and Practice of Teaching.* PROFESSOR EMERY.

2. Special Methods.*2 hrs., second term, first year.*

The aim in this course is to lead to an understanding of the relations of methods and matter to mind. Specific aims and methods in practical school work in the common school studies—arithmetic, grammar, geography, history, etc.—are studied and observed in the training school and the public schools of Reno, discussed in class and used as the basis for practice work with pupils, extra credits being given for new ideas in illustration or original devices which pass the test with classes of children. Knowledge papers, showing that the student has the requisite knowledge of principles to give a series of lessons upon important topics as: fractions, percentage, the pronoun, the verb, etc., are required. Power of imparting knowledge by each of the general methods, viz: instruction and questioning, must be fully shown in a series of illustrative science lessons, showing the logical plan of building up knowledge, and skill in bringing out the perceptive and discriminating powers in the mind of the child. PROFESSOR EMERY.

3. Practice Teaching.*2 hrs., four terms.*

The requirement for this course is the completion of one year of pedagogical work. The object is to bring out the individual powers of the student-teacher in teaching and governing a school. Plan of preparation: An outline of central and related points, covering a week's work, divided into daily lessons, is prepared and presented to the critic teacher. If approved, it is referred to the Principal, who thereupon assigns the student to class work under the supervision of critic teacher. For a definite time each lesson is outlined and methods and devices indicated. No unprepared or desultory work is allowed. PROFESSOR EMERY. PRINCIPAL BRAY, and teachers of the Reno Public Schools.

4. History of Education.*3 hrs., first term. Senior year.*

The objects of this course are to enable students to obtain clear outlines of the educational ideals of the leading nations of the past and present; the Chinese, Persians, Hindu, Egyptian, Grecian, Roman, European and United States; to gain a general idea of the fundamental principles in the teachings of their great philosophers and teachers, and to note the successes and failures in the ways and methods used to realize national ideals, with their direct and indirect influences upon national characteristics, and thus arrive at a clearer and broader view of the permanent truths and grander aims in the educational system of to-day. *Compayre:* History of Education. *References:* Davidson, and Library Work.

5. Philosophy of Education.*3 hrs., second term. Senior year.*

Part I. Oral analysis and written reproduction of thought in logical arrangement are required upon the general idea of education, its nature, its form, its limits; while the practical bearings of the sub-topics of work and play, habits, punishments, corrective and retributive (also preventive), different temperaments and capacities, processes of growth of the lower into higher faculties, are used for subjects of "talks" and more elaborate class essays.

Part II. Similar plans of work are carried through the second part of the book, the results sought being not only a knowledge of the facts and principles of education, but the culture or power of applying this knowledge to the art of teaching. *Rosenkranz:* Philosophy of Education.

6. Physiological Psychology.*3 hrs., first term. Senior Normal.*

Lectures, assigned readings and laboratory demonstrations. In the lectures, the anatomy and physiology of the human central nervous system and sense organs will be discussed with special reference to their relation to the mental phenomena.

7. Psychology.*3 hrs., second term. Senior Normal.*

Lectures, recitations, reports, and occasional laboratory demonstrations. This course must be preceded by Courses 5 and 6. Titchener's Primer of Psychology will be used as a text-book, supplemented by assigned reading.

III. BIOLOGICAL SCIENCE.

PROFESSOR FRANDSEN.

1. General Zoölogy.*4 hrs., first term. Sophomore.*

Lectures and laboratory. This course is an introduction to the whole field of zoölogy. It is intended for those who expect to teach natural science in the public schools and as a broader training for the study of the structures and functions of the human body. Some of the topics to be considered are the systematic positions and relations of animals, the differentiation of complex systems of tissues and organs from the simple, the activities and habits of animals, the main facts of development evolution theories, etc. In the laboratory a number of animal types are studied, beginning with the simplest and proceeding to the most highly organized. Special attention is given to the physiological activities of common animals. The laboratory work will take two periods a week of two hours each, and must come on Mondays, Wednesdays and Fridays.

2. Comparative Anatomy and Physiology of Vertebrates. *4 hrs., both terms. Senior.*

Lectures and laboratory. This course can only be taken by those who have previously had Courses 1 and 5, or their equivalents. It is designed for those who wish to lay a broad foundation for the subsequent study of human anatomy in the medical school, or who wish to do further advanced work in any field of zoölogy. The lectures aim to show the progressive development of structures from the lower to the higher vertebrates. In the laboratory the student will make dissections of the fish, frog, turtle, rabbit and pigeon, or allied forms. The course may be varied somewhat for the students in the School of Agriculture, more attention being paid to the study of the domestic animals.

3. Histology.*4 hrs., first term.*

Lectures and laboratory. This course must be preceded by Courses 1 and 2. The object of this course is a training in methods of killing, fixing, sectioning, staining and mounting objects for microscopic study. The student will either make preparations of some small animal, like the leech, earth worm or tadpole, or study the tissues and organs of some animal, like the frog or rabbit, devoting the whole term to the thorough study of one form.

4. Embryology.*4 hrs., second term.*

Lectures and laboratory. The laboratory work consists of the preparation and study of the frog or chick at successive stages of development.

5. Elementary Anatomy, Physiology and Hygiene.*4 hrs., first term.*

Recitations, lectures and laboratory. Special attention will be given to the subject of personal hygiene, emergencies, etc. The text-book work will be supplemented by assigned readings and reports. The laboratory work will consist of some microscopic work on the tissues and organs, simple physiological experiments and demonstrations, chemical reactions illustrative of the process of digestion, and the dissection of some vertebrate.

6. General Bacteriology.*3 hrs., second term. Senior.*

Assigned readings, lectures and laboratory. The following topics will be considered: Morphology and classification of bacteria. Methods of making cultures, staining, etc., fermentation, putrefaction, pathogenic bacteria. In the laboratory the student will learn how to make pure cultures and slide preparations of the more common bacteria.

IV. BOTANY AND HORTICULTURE.**DR. KENNEDY.****1. General Botany.***4 hrs., second term. Freshman.*

The course includes a general résumé of plant life from the lowest to the highest forms; slime, moulds, algae, lichens, fungi, liverworts, mosses, ferns, horsetails, club-mosses, conebearers and flowering plants. Special attention is given to the plants in each group of economic importance.

2. Structural and Systematic Botany.*4 hrs., second term. Sophomore.*

The course includes a study of the structure and relationships of the orders of flowering plants, with practical work in the field and laboratory illustrating the principles of natural classification. Open to those who have taken Course 1 or its equivalent.

3. Advanced Botany.*4 hrs., first term. Junior.*

The student will be introduced to methods of investigation, the use of the microtome, and the preparation of microscopic slides. Preliminary studies of the vegetable cell and its contents. Kind of tissue. Problems can be assigned suitable for a thesis providing the work is continued throughout two years. Open only to students who have taken Courses 1 and 2.

4. Economic Botany.*4 hrs., second term. Junior.*

A study of the history and evolution of the most important economic plants. Fungus diseases of cultivated plants and their remedies. Required in School of Agriculture.

V. CHEMISTRY.

PROFESSOR N. E. WILSON.

1. General Chemistry. *3 hrs., both terms. Freshman.*
 Non-metals, metals, and the carbon compounds; theoretical and descriptive. Recitations and lectures with illustrative experiments. Classroom work supplemented with laboratory exercises, one hour, first semester. *Richter: Inorganic Chemistry. Remsen: Chemistry of the Carbon Compounds. Freshman Science Schools.*

2. General Chemistry. *3 hrs., both terms. Sophomore.*

Non-metals, metals, and the carbon compounds; theoretical and descriptive. Recitations and lectures with illustrative experiments. Classroom work supplemented with laboratory exercises, one hour, both terms. *Remsen: Inorganic Chemistry.*

3. Qualitative Analysis. *3 hrs., second term. Freshman.*

This laboratory course includes the detection of the more common metals and acids, both in single and mixed substances. *Sharwood: Qualitative Analysis.*

4. Quantitative Analysis. *3 hrs., both terms. Sophomore.*

This course includes the gravimetric determination of the components of simple salts, limestone, feldspar, coal, ores of the common metals, acidimetry and alkalimetry, and volumetric analysis. After the general course as outlined is finished the work is completed by individual assignments. *Ladd: Manual of Quantitative Chemical Analysis.*

5. Organic Chemistry. *3 hrs., first term. Junior.*

Elements of Organic Chemistry as laid down in *Remsen's Organic Chemistry.* Laboratory exercises, one hour. *Orndorf's Laboratory Manual.*

6. Chemistry of Foods. *3 hrs., second term. Junior.*

Chemical composition and nutritive values of foods; attention will be also given to the adulteration of foods.

7. Industrial Chemistry. *3 hrs., second term. Junior.*

The application of chemistry to the industrial arts. Recitations and lectures.

8. Domestic Science Course. *3 hrs., both semesters.*

a. Second year: General Chemistry, lectures and text-book. Principles of Chemistry and Chemical Nomenclature. The non-metals and metals: Laboratory practice, one period, first semester. Qualitative analysis, two periods, second semester.

b. Third year: Lectures embracing: Chemistry of plants, organic and inorganic, essential and non-essential ingredients; sources of plant food, air and soil, assimilable and reserve plant food.

Foods: Carbohydrates, fats, nitrogenous substances, sources and manufacture of sugar, starch, glucose, etc.

Ferments and fermentation, and their application in the manufacture of vinegars, wines and malt liquors.

Chemistry of milk and its products.

Food adulteration and adulterants.

Potable water and a discussion of water from various sources from a sanitary view.

9. Dietetics. *2 hrs., both terms. Senior.*

Special course in Dietetic Value of Foods and in computing Dietaries.

VI. DOMESTIC ARTS AND SCIENCE.

MISS BARDEENWERPER.

1. Sewing. *2 periods, both terms. First year.*

The purpose of this course is to instruct in the various stitches used in hand sewing and mending, including the different seams, hems, patching, darning and buttonholes in cotton and woolen goods. The student prepares models that involve this work. This course also teaches the care and use of the sewing machine, and the draughting and making of under garments, the fitting and making of shirt waists, cotton dresses and children's dresses, and the draughting of patterns from measure. Work begun in the class is required to be finished at home. Talks on Textiles are given from time to time.

2. Sewing.*2 periods, both terms. Second year.*

During this year the draughting of patterns from chart is taken up, and the student has extensive practice in making patterns of waists and skirts. Each student is required to draft, fit and make a dress of plain woolen materials. During the latter part of this course, the proper handling of stripes and plaids is taught, and each student cuts, fits and stitches a waist of either striped or plaid materials. The first steps in millinery are included in the work of this year. This comprises the care of materials, the making and applying of folds, wiring, binding and lining of hats. The various kinds of facings—plain, sectional and Shirred—are prepared and placed. Bow-making is taught, both as applies to hats and to dresses. Practice materials—canton flannel, silkolene, cheese-cloth, satine and cambric—are used this year.

3. Sewing.*2 periods, both terms. Third year.*

The student is directed in the making of a fancy waist; original work is done, and she is encouraged to exercise her individual taste in making dress trimmings, finishings, and designs. The work in millinery is continued throughout this year. Hat and bonnet frames are covered, and tam crowns are made of practice materials. Instruction is given in the making and handling of rosettes and puffs, and in the remodeling of bonnet and hat frames. Two Shirred hats are made, one of practice materials, and one of chiffon. The student is taught to make wire and buckram hat and bonnet frames. The renovating of silk, lace and velvet fabrics forms part of the work in this course. Lectures are given in harmony of outline and color.

4. Sewing.*2 periods, second term. Senior.*

The most advanced work in sewing is done in this semester—the drafting, cutting, fitting, and making of a tailor-finished gown. Advanced millinery comes in as part of the course in sewing for this term. Each student is expected to trim several hats, in the materials appropriate for the season. Feather curling, draping of veils, and the principles of ruche and boa-making are now taken up. The handling of crape, the most difficult work in millinery, finishes this course.

5. Cookery.*2 periods, both terms. First year.*

The best arrangement of the kitchen in every detail of its plan and furnishings, both as regards convenience and proper sanitary conditions, is first considered. Methods to be used in the care of china, glassware, silver, and cooking utensils are taught. The selection, composition, and preparation of the simple foods form the basis of the first part of this year's work. Food values are discussed from a dietetic standpoint. The first practice work comprises the cooking, according to economic standards, of the typical and simple foods—eggs, cheese, meats, soups, vegetables, plain salads, and desserts; the preparation and use in various forms of batters—muffins and griddle cakes and doughs—breads, biscuit, doughnuts, cake, and pastry. Demonstrations of frying, roasting, and broiling are given. Cuts of meat are studied from the chart and from actual experience gained in visits to the market. During the latter part of this year more advanced work in practice cookery is done, elaborating the principles taught earlier in the course; and the student begins to rely upon her own judgment in the preparation of entrées, salads and salad dressings, sauces, desserts, frozen creams, ices, sherbets.

6. Cookery.*2 periods, both terms. Second year.*

The dining-room, its arrangement and appointments, is considered with reference to approved and artistic principles. Menus are prepared by the student in accordance with dietetic and economic standards. The garnishing of dishes and serving of meals is discussed. Practice work this year consists in the preparation of more elaborate dishes—fancy cakes, soufflés, frostings, sauces, pastries, including puff paste, salads and salad dressings. This work is followed by a course in Invalid Cookery. The essential feature in this course is the preparation and dainty serving of individual dishes.

7. Cookery.*2 periods, both terms. Third year.*

Jelly making, preserving and canning of fruits and vegetables, pickling, making of chow-chows and catsups form part of this year's work. Practice in candy making follows; this includes all varieties of French bonbons (those requiring fondant as their

basis), and the simpler, so-called home-made candies and glacé fruits. Greater proficiency is attained in advanced cookery, and a series of demonstrations in the use of the Chafing Dish is given.

8. Cookery.

2 periods, first term. Senior.

The main feature of this course is the calculation of dietaries according to individual needs, physical conditions, age and occupation being considered. The practice work consists in the preparation of the meals thus computed, some time being given to advanced fancy cookery. A luncheon is served at the end of this semester.

9. Household Economics.

1 hr., both terms. Senior.

This course comprises lectures and informal talks on the home, its location and construction, with special attention to the arrangement and furnishing of the kitchen, laundry and sleeping room, according to approved hygienic methods of ventilating, heating, lighting, etc. The general care of the house is discussed. The use of chemicals in cleansing—removing of stains, etc.—for laundrying purposes, and as disinfectants are considered. Proper methods of laundrying table and bed linen and clothes are taught, together with the handling of laces, colored embroideries, and curtains. Estimates, in pursuance of economic principles, are made by the student of the cost of time by the day, the month, and the year for the individual and the family, incomes varying in amount being used as the basis for calculation.

VII. ENGLISH LANGUAGE AND LITERATURE.

PROFESSOR CUSHMAN.

1. Composition and Rhetoric.

1 hr., both terms. Freshman.

The frequent writing of narrative and descriptive essays, description of machines, treatment of scientific subjects, drill in the fundamental principles of Rhetoric.

b. Themes.

Six themes. *Wendell: English Composition.*

1 hr., both terms. Junior.

c. Forensics.

Three forensics embodying original research. Lectures on argumentative composition. *Baker: Principles of Argumentation.*

d. Thesis.

Senior.

An exhaustive treatment of some subject in English Literature. Students who wish to write a thesis in English Literature must have done three years of creditable work in the English Department.

2. Modern Prose.

2 hrs., both terms. Freshman.

The abundant reading of standard American and English Prose, both esthetic and scientific.

3. Chaucer, Spenser, Bacon, and Milton.

3 hrs., both terms. Sophomore.

4. Modern Poetry.

3 hrs., both terms. Junior.

The poets of the Nineteenth Century. Reading and interpretation of selections from a few principal authors. Discussion of the principles of poetic composition. *Gummere: Handbook of Poetics.*

5. Shakespeare.

3 hrs., both terms. Senior.

Six plays, three tragedies and three comedies, will be read in class. *Woodbridge: The Drama, its Laws and its Technique.*

6. American Literature.

3 hrs., both terms. Junior.

An investigation of the development of American Literature from the earliest colonial writers to the outbreak of the Civil War.

VIII. ENTOMOLOGY.

MR. DOTEN.

1. General Course.

3 hrs., second term. Senior.

Lectures on the habits and transformations of our most interesting insects, with the characteristics of the orders, sub-orders, etc.

2. Economic Entomology.

Junior-Senior. Elective.

Lectures and field work on our dangerous insect pests. Discussions of their life histories and the best means of combating them.

IX. GEOLOGY AND MINERALOGY.

Dr. LOUDERBACK.

1. **Mineralogy: Elementary.** *2 hrs., both terms. Sophomore.*
 a. Lectures on (1) the general properties of minerals, with particular reference to their use in determinations of species.
 b. Laboratory: (1) Determination of minerals by observation methods and simple tests useful in the fields; (2) Blowpipe mineral analysis.
 Prerequisite: Elementary Chemistry and Laboratory.

2. **Geology: Dynamic and Structural.** *3 hrs., first term. Junior.*
 Illustrated lectures.

3. **Petrography.** *3 hrs., second term. Junior.*
 The nature, origin and distinctive properties of rocks.
 Prerequisites: Mineralogy (1) and Geology (2).

4. **Geological Laboratory.**
 (1) Rock constituents and rock structures. *1 hr., second term. Junior.*
 Supplementary to Course 3.
 (2) Study of rock groups: (a) petrographic, (b) stratigraphic. *1 hr., first term. Senior.*
 Supplementary to Courses 3 and 6, and following Course 4.

5. **Field Geology.** *1 hr., second term. Junior.*
 A practical study of field methods and their application to the formations in the vicinity of the University, with practice at map reading and plotting of results.
 Prerequisites: Course 3 (may be taken simultaneously); ten days of actual satisfactory field work during second term.

6. **Geology: Historical.** *13 hrs., first term. Senior.*
 An outline of the history of the earth, as written in the rocks of the crust and the topographic forms of the surface; with the distinctive characteristics of the rocks of the different geological periods, especially in Western America.
 Prerequisite: Geology (2).

7. **Geology: Economic.** *3 hrs., second term. Senior.*
 A discussion of the nature and origin of ore and other economic deposits, and a study of their mode of occurrence in typical and important mining regions.
 Prerequisites: All the above courses.

8. **Geology: Advanced Work.**
 This State, even in the vicinity of the University, offers a particularly open and inviting field of investigation in all of the branches of geological science—physiography (physical geography), petrography, and glacial, stratigraphic and economic geology.
 The work may consist of:
 1. The study of some special geologic problem, or of the geology of some special district in the field, and the preparation of results.
 2. The investigation of special problems, or the study of material gathered in the field, by chemical or microscopical laboratory methods.
 3. Critical reading and discussion of important scientific economic monographs, and of current geological literature.

X. GREEK LANGUAGE AND LITERATURE.

PROFESSOR UNSWORTH.

1. **Beginning Greek.** *4 hrs., both terms. Freshman.*
 Thorough drill is given in the elements of the Greek language, along with a liberal amount of reading in Xenophon and Herodotus. *White:* Beginner's Greek Book. *Goodwin:* Selections from Xenophon and Herodotus.

2. **The Iliad or Odyssey.** *4 hrs., both terms. Sophomore.*
 The reading of Homer's Iliad or Odyssey is accompanied throughout the year by methodical instruction in Greek Grammar, Greek Prose Composition and History of Ancient Greeks. *Goodwin:* Greek Grammar. *Allison:* Greek Prose Composition. *Pennell:* History of Ancient Greece.

3. Lysias and Plato.*3 hrs., first term. Junior.*

A critical reading of the orations of Lysias and Plato's *Apology of Socrates* is made the preparation of an appreciative study of Greek civilization.

4. Eschylus.*3 hrs., second term. Junior.*

The *Prometheus Bound* of Eschylus and lectures on the orators and dramatists of Greece.

5. Euripides and Sophocles.*3 hrs., first term. Senior.*

Exposition of the Greek drama. The *Alcestis* of Euripides and the *Electra* of Sophocles.

6. Greek Testament.*4 hrs., second term. Senior.*

Critical reading of the Gospel of St. John, with lectures on the common dialect and on Hellenistic Greek.

XI. HISTORY AND POLITICAL SCIENCE.**ASSISTANT PROFESSOR WIER.****1. Medieval History.***3 hrs., both semesters. Freshman.*

Course 1 covers the period from the Fourth to the Fifteenth Century. Beginning with the history of the barbarian invasion, it traces the development of primitive Germanic institutions, the rise of the mediæval church and the papacy, the expansion of the Frankish Empire, the establishment of feudalism, the formation of modern states, the important features of the Renaissance, and the beginning of the Reformation. Special stress is placed on the study of forces and of the great world movements with the aim of giving the proper perspective for the appreciation of modern history. A knowledge of the main facts of Ancient History is essential to the successful pursuance of this course.

2. History of Europe in the Seventeenth, Eighteenth, and Nineteenth Centuries.*3 hrs., both semesters. Sophomore.*

The aim is to trace political and social development as well as international relations since the Peace of Westphalia. Special attention will be given to the rise of Russia and of Prussia, and to the change in Western Europe from the absolutism of the "Old Regime" to the democracy and individualism of the Nineteenth Century.

3. History of England to 1485.*2 hrs., both semesters (3 hrs. credit). Junior.*

The purpose of the course is to give the student a clear view of the period from Prehistoric and Roman Britain and the English settlements, through the growth of the English Kingship and the development of the Parliamentary Constitution to 1485. The character of the work will render desirable previous training in history on the part of the student. This course is important as a preparation for the study of law. [Course 3 will not be given in 1902-3.]

4. The History of England Since 1485.*2 hrs., both semesters (3 hrs. credit). Junior.*

Course 4 alternates with Course 3, and is likewise important as a preparation for the study of law. The political history is traced merely as a background for the study of the growth of the English Parliament and the Cabinet system. Comparisons are constantly made between the existing forms of government and administration in the various countries of Europe and America.

5. Constitutional and Political History of the United States, 1775-1840.*3 hrs., both semesters. Senior.*

This course is a detailed study of the political and constitutional questions arising during the period of the Formation of the Union. Open to graduate students and Seniors; also, by special permission, to those below Senior rank.

6. Constitutional and Political History of the United States Since 1840.*3 hrs., both semesters. Senior.*

Course 6 alternates with Course 5, of which it is a continuation. Commencing with the later period of the slavery struggle, it covers the questions of secession, rebellion, and reconstruction. Particular attention is given to the discussion of present political problems. Open, by special permission, to advanced students below Senior rank.

[Course 6 will not be given in 1902-3.]

7. Special Courses.

Special courses of study for graduate students will be laid out to fit the needs of each individual. Research work may thus be carried on under the guidance of the department.

8. Thesis Work.

In each of the first six courses in History the student is required to prepare a thesis embodying the results of independent work in the investigation of some special topic. When a student is taking two or more courses in History the same semester, he may select his thesis in connection with either of them.

XII. HISTORY OF ART.

ASSOCIATE PROFESSOR MARTIN.

1. History of Art Through the Renaissance. *1 hr., both terms. Elective.*

The development of art with special reference to painting is briefly traced from its beginnings to the Renaissance. The lives and work of the great masters of the Fifteenth, Sixteenth, and Seventeenth Centuries will then be especially considered, with a view not only to establishing some principles of art criticism, but to understanding life and history so far as art is the interpreter. As far as possible, the works of the masters will be studied from photographs and lantern slides of the originals. Lectures. Miss MARTIN.

XIII. HYGIENE AND PHYSICAL TRAINING FOR YOUNG WOMEN.

MISS EDWARDS. *3 hrs., both terms.*

The aim of the work in this department is: (1) To give the student instruction in matters pertaining to the preservation and restoration of health. (2) Thorough practical gymnastic work to assist in the general bodily development.

Each student is given an anthropometrical and medical examination. The data gained through the measurements and examination is used as a basis for instructing the student in the hygienic principles most conducive to good health; to prescribe work for the correction of special weakness and also for the symmetrical bodily development. Athletic and gymnastic games are included in work. The student takes part in these from choice and is not allowed to do any gymnastic or athletic work for which she is not physically able. Basket-ball, lawn tennis and bicycling are all encouraged.

For the work in this department the University affords a splendid gymnasium building with a floor space 60 by 120 feet. Its equipment is fair, including rings, pulley weights, wands, dumb-bells, Indian clubs and a few pieces of special apparatus.

Course 1. Individual and class work, with and without apparatus. *3 hrs., per week.*

Course 2. Designed for all students who are going to become teachers in public or private schools, and includes instruction in school hygiene and in schoolroom gymnastics. *3 hrs., per week.*

XIV. LATIN LANGUAGE AND LITERATURE.

PROFESSOR CHURCH.

1. Vergil. *5 hrs. Freshman.*

Aeneid, Mythology. The literary and stilistic features of the *Aeneid* will be emphasized. *Comstock: The Aeneid of Vergil. Gayley: Classic Myths.*

2. Livy. *3 hrs., first term. Sophomore.*

Livy's History of Rome, Book XXI, Prose Composition. *Greenough and Peck: Livy, XXI-XXII. Miller: Prose Composition.* [This course will be omitted in 1902-3.]

3. Cicero. *3 hrs., first term. Sophomore.*

Cicero, *De Senectute*, Prose Composition, Sight Reading. *Kelsey: Cicero, De Senectute. Miller: Prose Composition. Post: Latin at Sight.*

4. Horace, Catullus and Tibullus. *3 hrs., second term. Sophomore.*

Selected lyric poems of Horace, Catullus and Tibullus. *Smith: Horace, Odes and Epodes. Crowell: Selections from the Latin Poets.* [This course will be omitted in 1902-3.]

5. **Plautus and Terence; The Drama.** 3 hrs., second term. Sophomore. Selected comedies. *Fowler*: *Plautus, Menaechmi*. *Sloman*: *Terence, Phormio*.

6. **Roman Literature.** 1 hr., second term. Sophomore. Lectures and recitations on the development and decline of Roman literature. *Wilkins*: *Roman Literature*, supplemented by assigned readings.

Courses 1 and 6 and any two of Courses 2-5 are required for the Degree of Bachelor of Arts.

7. **Roman Antiquities and Life.** 2 hrs., first term. Lectures illustrated by lantern views and supplemented by assigned readings. [This course will be omitted in 1902-3].

8. **Rapid Reading.** 2 hrs., first term (credit, 1 hr.). Selections from various authors. The translation will be mostly at sight, and very little preparation for the lesson will be required. *Peck and Arrowsmith*: *Roman Life in Latin Prose and Verse*.

9. **Horace and Juvenal: Satire.** 3 hrs., second term. Characteristic satires. *Greenough*: *Satires and Epistles of Horace*. *Pearson & Strong*: *Thirteen Satires of Juvenal*.

10. **Tacitus and Pliny the Younger.** 3 hrs., second term. *Furneaux*: *The Germania of Tacitus*. *Wescott*: *Selections from Pliny's Letters*. [This course will be omitted in 1902-3].

Any one or more of Courses 2-5, not previously pursued, and 7-10 may be elected by those who have finished the required courses in Latin.

XV. LAW, ETHICS, AND ECONOMICS.

PRESIDENT STUBBS AND PROFESSOR LEWERS.

1. **Municipal Law and Ethics.** 3 hrs., first term. Junior. The object of this course is to study the subject of law with a view to the duties and responsibilities of citizenship. Lectures and text with required readings.

2. **International Law and Ethics.** 3 hrs., second term. Junior. The principles of International Law are studied in their relation to the political life and history of modern nations. Text and required readings.

3. **Economics.** 3 hrs., first term. Senior. The principles of Economics in their relation to modern industrial life. Text and required readings.

4. **Political Economy.** 3 hrs., second term. Senior. The elements of Political Economy are studied with aid of text and library reading.

XVI. MATHEMATICS AND MECHANICS.

PROFESSOR THURTELL.

1. **College Algebra.** 5 hrs., first term. Freshman. Begins with quadratic equations, and includes logarithms, the Binomial Theorem, determinants and the general properties of equations. *Bowser*.

2. **Solid Geometry and Trigonometry.** 5 hrs., second term. Freshman. Trigonometric functions, practice in the use of plane and spherical triangles, and in the application of spherical trigonometry to the elementary problems concerning the astronomy of the earth.

3. **Analytic Geometry.** 5 hrs., first term. Sophomore. The geometry of the conic sections and the equations of geometrical surfaces principally. Subject holds a prominent place in all engineering colleges. *Wentworth*: *Analytical Geometry*.

4. **Calculus.** 5 hrs., second term. Sophomore. Necessary in all engineering courses. Both the differential and the integral calculus. *Osborne*: *Calculus*.

5. **Astronomy.** 2 hrs., second term. Senior. A course of study in mathematical astronomy with special reference to the subject of civil engineering. *Green*: *Practical Astronomy*.

6. Statics, Kinetics, Kinematics.*3 hrs., both terms. Junior.*

Many practical and difficult problems are solved by the students, and the effort is made to develop originality of thought and strong mental power. The calculus is freely used.

7. Hydraulics.*3 hrs., second term. Junior.*

Some of the subjects considered are: Equilibrium of liquids, pressure of a liquid at any depth, strength of embankments, strength of pipes, pressure of gases at various temperatures, resistance and work of liquids, hydraulic machines, water wheels and pumps.

8. Strength of Materials.*5 hrs., first term. Senior.*

This course covers work in applied mechanics, analysis of structures, both by graphical and analytic methods, roof trusses, bridge trusses, stress strain, etc.

9. Thermodynamics.*5 hrs., second term. Senior.*

The laws of the expansion and compression of gases and of steam. The relation between heat and work. The relation between inner and outer work done on a body. Practical illustrations of these laws in a steam engine, the gas engine and the injector. *Runtgen and Dubois: Thermodynamics.*

XVII. MECHANICAL ENGINEERING.

PROFESSOR BLESSING AND MR. DARLING.

1. Descriptive Geometry.*3 hrs., second term. Sophomore.*

The representation of points, lines and planes is taught, together with problems relating to the right line and plane. Curved lines, tangents, normals, cylindricals, conical and warped surfaces, the helicoid, the hyperboloid, and problems relating to them; shades and shadows and the principles of perspective and isometric projection are studied. Many practical problems are given for solution and construction.

2. Kinematics.*5 hrs., first term. Junior.*

Under the head of kinematics is studied the geometry of machinery, showing the laws which govern the velocity of moving parts, velocity ratio in various motions, the correct forms for gear teeth, quick return motions, link motions and the manner of designing trains of mechanism. The mathematical demonstrations and proofs are first studied from text book, and then practical problems are given to the student to solve on the drawing board.

3. Electricity and Magnetism.*5 hrs., second term. Junior.*

Some of the subjects considered in this work are Frictional Electricity, Magnetism, Current Electricity, Electrostatics, Electro-magnetics, Measurements of Currents, Thermo-electricity, Heat, Power and Light from Electric Currents, Inductance, Dynamos, Motors, Transformers, Electro-chemistry, Telegraphy, Telephony, and Electric Waves.

4. Theory of Steam Boilers.*5 hrs., second term. Junior.*

Here is studied the design and construction of the various types of commercial steam boilers; including methods of riveting and staying; the care of boilers, the prevention of scale and corrosion, consumption of fuel, determining the horse power of boilers, the design of boilers for efficiency and economy, the methods of power transmission and the study of modern boiler plants. At the completion of the text book each student is required to design a boiler or battery of boilers and necessary fittings. This includes the preparation of specifications and complete working drawings ready for the boiler maker and the erecting engineer.

5. Machine Design.*5 hrs., first term. Senior.*

This work includes a study of the application of the laws of velocity force and strength of materials to the design of machinery. The design of tooth and belt gearing, shafts, journals, hangers, cylinders, springs, bolts, keys, etc. The text-book work is strengthened by the practical work on the drawing board.

6. Steam Engine Design.*5 hrs., second term. Senior.*

Here the principles involved in the design of all parts of the steam engine are carefully considered, together with the theoretical indicator diagrams for simple, com-

pound and triple expansion engines. Crank effort diagrams, illustrating the influence of friction and of the reciprocating and rotative parts, are taken up, and finally the valve motion and weight of the reciprocating parts are designed to give results which will conform to an assumed ideal indicator card.

7. Dynamometers and Measurement of Power. *4 hrs., first term. Senior.*

This study includes the determination of driving power, friction brakes, absorption dynamometers, transmission dynamometers, the measurement of water and electrical power and power required to drive machinery. The text book is followed by experimental work in the laboratory.

8. Power Plants. *2 hrs., second term. Senior.*

In the industrial and business world to-day the power plant occupies a place of importance which it never has had hitherto, and the success or failure of business enterprises and manufacturing corporations often depends upon the condition of the power house. In order to judge fairly the advantages and disadvantages involved in questions relating to the power plant the engineer must be familiar with the solutions which experience and good judgment have proposed for similar problems. To this end the mechanical engineering of power plants is here presented in rather a non-mathematical way and the machinery appliances and economical auxiliaries employed have their practical and experimental side shown.

9. Valve Gearing. *4 hrs., first term. Senior.*

This is a study of the various forms of standard engine valves, link motions, radial gears and shaft regulation. The mathematical proofs of the methods and results attained by the Zenner, Bilgram, Reuleaux and Elliptical diagrams are studied from the text book, after which the designing of the valve gears becomes a drawing-board process. Each student before completing the work must design some form of standard engine valve and governor; the data being taken from trade catalogues and engines actually in use.

10. Thesis Work. *2 periods, second term. Senior.*

The later part of the second semester of the Senior year is given to thesis work. This consists of some new design of a machine or an original investigation of some subject congenial to the student's taste and included in the scope of the course. The subjects for these theses are assigned to the student by the head of the Mechanical Engineering Department; and the completed theses, together with the drawings and illustrations accompanying them, are kept on file that they may serve as reference for future investigations.

11. Inspection Visits.

It is the desire of the department to arrange for an inspection trip to the most important manufacturing establishments in the vicinity in order that the student may make a study of modern structures and methods in manufacture. The practical value of such excursions has long been recognized by such institutions as Kentucky State College, Rose Polytechnic Institute, Purdue University, Boston "Tech," Case School of Applied Science, and many others, where they have become regular features of the course. These trips are for Juniors and Seniors only.

XVIII. MECHANIC ARTS.

MR. DARLING AND MR. BROWN.

1. Wood Shop.

2 periods, both terms. Freshman.

The wood shop contains four power wood-turning lathes, one Fay Egan tilt-table jig-saw, one Fox wood trimmer, one combination wood planer and circular-saw machine, one band saw, one wood-paneling machine, one grindstone, twenty-four benches and fifteen sets of wood-worker's tools.

The work in this branch of the department is required of students in Mechanical Engineering, Civil Engineering and Mining Engineering, and may be taken by any other male students desiring it, provided accommodations are at hand. At present there are thirty students. This work is carried through both semesters of the Freshman year, and the instruction is intended to familiarize the student with the use of hand and machine tools and with the most approved methods and processes followed

in engineering construction. The text book used in connection with the practical work is: *Goss*: Bench Work in Wood. The bench work includes the following operations: Plowing, sawing, rabbeting, planing, notching, splicing, mortising, tenoning, dovetailing, framing, paneling, and the general use of carpenters' tools. The wood turning involves the various principles of lathe work in wood, and is carried on from a set of blue prints issued by the department for that purpose.

Pattern-making, which gives the student discipline in the construction of patterns for foundry work, is taken only by students in Mechanical Engineering.

2. Forge Shop.

The forge shop contains eight forges equipped with smithing tools, and is fitted with pressure and exhaust system piping and fans. The work in forging includes exercises in heating, bending, drawing, upsetting, plain welding, butt welding, lap welding, ring welding, tee welding, etc. In steel forging the exercises include the making and tempering of punches, drills, chisels, annealing, case-hardening and the making of a complete set of machine-cutting tools for the student's future use in the machine shop.

3. Machine Shop.

The machine shop is equipped as follows: One shaper, three machine lathes, one drill press, one sensitive drill, one universal grinder, one milling machine, one pipe-cutting machine, one dry emery wheel, one wet emery wheel, four vises, an engine and a dynamo. Instruction in this work consists of vise work in iron, including surface chipping, surface filing, squaring and fitting, round filing, sawing, scraping and polishing. Machine work in metals includes exercises in straight and taper turning, slotting, drilling, boring, planing and screw cutting. Practice in the machine shops begins with a series of simple exercises teaching the proper use of the hammer, chisel, and file; the laying out of work, and the use of the lathe, shaper, milling machine, etc. As the student becomes familiar with the use of tools and machines, he is given work on simple machine details and construction, and finally assembles the parts into the complete machine.

TRADE CATALOGUE LIBRARY.

In order to familiarize the student in Mechanical Engineering with the different manufacturing firms throughout the country, and the progress they are making in perfecting engines, pumps, boilers, dynamos, etc., there has been added a trade catalogue library. The trade literature of to-day is gotten out in the most attractive form possible, and with an educational motive in view. Many catalogues are text books of a very high order, and gotten out with the express idea of teaching the practical man the theoretical, and the theoretical man the practical, nature and advantages of the machine the firm is placing upon the market. The benefit derived by referring to these books, in connection with the class-room work, is at once apparent, renewed interest being shown by the student in his text-book work when he sees the practical and commercial applications of the theories he is studying.

XIX. DRAWING.

PROFESSOR BLESSING AND MR. DARLING.

Courses marked † require knowledge of the text as laid down in the School of Mechanical Engineering.

1. Freehand Drawing.

5 hrs., first term. Freshman.

2. Mechanical Drawing.

5 hrs., second term. Freshman.

Course 1 for Domestic Arts and Science, and General Science. Courses 1 and 2 for Mechanical, Agricultural, Civil, and Mines. Course 2 is open to those completing Course 1.

†3. Advanced Freehand Drawing.

5 hrs., first term. Sophomore.

†4. Descriptive Geometry.

3 hrs., second term. Sophomore.

5. Elementary Machine Design.

3 hrs., second term. Sophomore.

Courses 3, 4, and 5, Mechanical and Civil. Course 4, Mines. Course 3 is open to those who have completed Course 1; Courses 4 and 5 to those having completed Course 2.

†6. Kinematics and Mechanism.

11 hrs., first term. Junior.

†7. **Graphic Statics.** *2½ hrs., second term. Junior.*
 †8. **Steam Boiler Design.** *10 hrs., second term. Junior.*
 Courses 6, 7, 8, Mechanical; Course 7, Mines and Civil. Courses 6 and 7 open to those who have completed Course 4. Course 8 open to those who have completed Course 5.
 †9. **Advanced Machine Design.** *2½ hrs., both terms. Senior.*
 †10. **Valve and Governor Design.** *10 hrs., second term. Senior.*
 Course 9 is open to those who have completed Course 5; Course 10 to those who have completed Courses 7 and 9.

XX. METALLURGY AND ASSAYING.

PROFESSOR YOUNG.

1. **General Metallurgy.** *1 hr., first; 2 hrs., second term. Junior.*
 Production of metals; physical properties of the more important metals and alloys; metallurgical products and classification of processes, fuels, furnaces; preparation of ores, crushing and sampling. Lectures and text.

2. **Assaying.** *Both terms. Junior.*
 Assays of gold and silver ores by scorification and crucible methods. Assays of furnace products, gold and silver bullion. Crushing and preparation of samples; use of horn and batea and pan. Lectures, 1 hour, first term, Junior. Laboratory, 1 period throughout the year. First term: Cupellation, parting, scorification and sampling. Second term: Crucible methods, bullion assays and practice on miscellaneous ores. Text.

Prerequisites: Quantitative Chemistry and Mineralogy.

3. **Assaying—Short Course.**
 Cupellation, parting, scorification and sampling. Laboratory. Text only. Two periods per week for first six weeks of the second term. This course is open to those who have not completed the necessary work in Chemistry and Mineralogy.

4a. **Metallurgy of Gold and Silver.** *4 hrs., first term. Senior.*
 Lectures. A discussion of the ores, processes for separation (amalgamation, chlorination, cyaniding, etc.); equipment and organization of plants.

4b. **Metallurgy of Copper, Lead and Zinc.** *4 hrs., second term. Senior.*
 Lectures and text. Methods of treating lead, copper and zinc ores; equipment and organization of plant; discussion of the economic conditions in the problem of treating copper, lead and other ores.

4c. **Metallurgical Laboratory.** *3 periods, both terms. Senior.*
 Laboratory experiments on ores. Designed to illustrate and supplement Courses 4a and 4b, and to give the student a working knowledge of the principal processes.

Prerequisites: Quantitative Chemistry, Assaying and Mineralogy.

5. **Metallurgical Laboratory.** *2 to 4 periods.*
 Assignment of special problems in the treatment of ores. Designed to supplement Course 4c.

Prerequisites: Quantitative Chemistry, Assaying, Mineralogy, etc.

XXI. MILITARY SCIENCE.

CAPTAIN CLARK.

1. **Military Drill.** *3 hrs., both terms. All male students.*
 The practical instructions consist of squad, company and battalion drills of infantry, both in close and extended order, small-arms target practice, advance guard, rear guard, outposts, ceremonies, practice marches, signal drills, band practice. Privates will be frequently drilled as acting officers.

2. **Theoretical Course.** *1 hr., both terms. All male students.*
 The theoretical work consists of recitations in tactics and on the elementary principles of the art and science of war, of lectures given by the Military Professor on the history of warfare, military education, laws of war, strategy, grand and minor tactics, and current military subjects.

XXII. MINING AND CIVIL ENGINEERING.

PROFESSOR WRINKLE.

1. Surveying. 5 hrs., both terms. Junior.

Theory and practice of land, topographical, railroad and mine surveying. Field work and map drawing in connection therewith.

2. General Engineering. 5 hrs., first term. Senior.

Materials of construction, strength of materials, highways and pavements, hydraulics, dams, irrigating canals, reservoirs, water pipes, foundations of structures, masonry, retaining walls, earthwork.

3. Engineering Structures. 5 hrs., second term. Senior.

A study from text, models and actual examples of the principal types of structures, such as roof trusses, bridges, etc. Determination of stresses, both analytically and graphically, and supplemented by the work in the Drawing Academy.

4. Drawing.

Topographic drawing and map making. "Reinhart's Lettering" is used as a text for lettering.

5. Mining. 5 hrs., both terms. Senior.

Lectures on prospecting, development, drainage and ventilation of mines, blasting, mining machinery and mining laws, visits to mines.

XXIII. MODERN LANGUAGES.

PROFESSOR DE LAGUNA AND MISS BUSS.

1. Elementary German. 4 hrs., both semesters. Freshman.

The aim of the first year's work in German is to combine the advantages of abundant oral practice with thorough drill in grammar. Collar's "Eysenbach," Huss' "Preparatory German Reader," Volkmann's "Kleine Geschichten," Baumbach's "Waldnovellen." PROFESSOR DE LAGUNA.

2a. Schiller. 4 hrs., first semester. Sophomore.

Schiller's Jungfrau von Orleans, Wilhelm Tell or Maria Stuart. Special attention will be given to the play from a literary and historical standpoint, while drill in grammar will be obtained from frequent exercises in prose composition. *Harris*: German Prose Composition. Miss Buss.

2b. Goethe, Lessing, Heine. 4 hrs., second semester. Sophomore.

Egmont, Nathan der Weise, Die Harzreise. These works will be read with a view to developing the understanding and appreciation of the difference and variety in style and thought of their authors. The reading will be accompanied by the study of the lives of the men.

3. Goethe. 3 hrs., both semesters. Junior.

Goethe's Faust will be studied (Parts I, II), with lectures on the history and development of the Faust legend and the philosophical and ethical ideas of the drama. The study of the drama is accompanied by lectures on the life of Goethe as it enters into his work. *Thomas*: Goethe's Faust. Miss Buss.

4. History of German Literature.

Lectures and recitations on the period from Luther to Goethe. Bernhardt's Deutsche Litteraturgeschichte will be used as a text-book, while references will be given to other standard works.

5. Seminary in Conversational German.

Open to all students who have completed Coursé 1. PROFESSOR DE LAGUNA.

6. Elementary French. 4 hrs., both semesters. Freshman.

The aim of this course is to give a thorough drill in grammar and facility in reading easy French. *Chardenal*: Complete French Course. *Rollin*: Preparatory French Reader. *Michaud*: Poésies de quatre à huit vers. PROFESSOR DE LAGUNA.

7. Sophomore French. 4 hrs., both semesters.

The study of grammar is continued with Grandgent's "Essentials of French Grammar" as the text. Prose Composition Work is begun. Texts read: *Souvestre*'s

"Le Philosophe sous les toits"; Erckmann-Chatrian's "L'Ami Fritz"; Sandau's "Mademoiselle de la Seigliere"; Lamartine's "Scenes de la révolution française"; Augier's "Le gendre de M. Poirier." **PROFESSOR DE LAGUNA.**

8. French Dramatists.*3 hrs., both semesters. Junior.*

In this course are read Moliere's "Les précieuses ridicules," "Les femmes savantes," "Le misanthrope," and "Tartuffe"; Corneille's "Le Cid" and "Polyeucte"; Racine's "Esther" and "Athalie"; Hugo's "Hernani" and Rostand's "Cyrano de Bergerac." A study in French literature is made with Duval's "Histoire de la littérature française" as a basis. The students are required to write out in French synopses of the plays read. **PROFESSOR DE LAGUNA.**

9. Elementary Spanish.*2 hrs., both semesters. Senior.*

This elementary course in the Spanish language is for those students who expect to make immediate and practical use of Spanish in their vocation as engineers or business men. Therefore only so much of grammar as may be necessary in the acquirement of a ready use of words and idioms is taught in this course. Required of Senior Mines. **PROFESSOR DE LAGUNA.**

XXIV. PHYSICS.**DOCTOR LOUDERBACK.****1. Physical Laboratory.***2 periods, both terms. Sophomore.*

A series of more or less careful quantitative experiments intended to give the student a practical knowledge of the fundamental laws of Physics, and to introduce him to careful quantitative measurement. Care, neatness, exactness, and close scientific reasoning are the characteristic features of the work.

2. Light and Heat.*3 hrs., first term. Junior.*

Illustrated lectures.

Prerequisite: Course 1.

3. Electricity and Magnetism.*3 hrs., second term. Junior.*

Illustrated lectures.

Required as Course 2.

THE UNIVERSITY HIGH SCHOOL.

Preparatory to the University Schools.

GENERAL STATEMENT.

The Department of Secondary Education in the University has been organized by the Faculty of the University and approved by the Regents, in order to secure adequate preparation for the University and to offer the advantages of thorough high school training to the many young people who live in sections of the State where there are no high schools. *In all cases where high schools are established, students should finish the work in the home school, and not seek admission to the University High School.*

COURSES OF STUDY.

The courses of study cover the usual high school period of three years, but differ from the usual High School Courses in that they seek to prepare as thoroughly and as quickly as possible for admission to the Freshman Class of the University.

THE LATIN COURSE.

The Latin Course herewith prescribed gives, in the judgment of the University Faculty, the best preparation for the University Schools, and it advises this course to be followed, so far as possible, by students preparing for the University. All the subjects prescribed in this Latin Course are required for admission to the Freshman Class of the University, except Latin, for which students may offer an equivalent in other subjects, such as French, German, Spanish, History, Chemistry, Botany, Zoölogy, or Physical Geography. Latin is of course required for admission to the School of Liberal Arts and the Latin Course of the State Normal School.

THE GERMAN AND THE ENGLISH COURSES.

These two courses give adequate preparation for all the Science Courses in the University. They allow a reasonable choice of subjects preparatory to the University as between Latin, German and Elementary Science, or History and Elementary Science.

COMMERCIAL COURSE.

GENERAL STATEMENT.

The Commercial Course has a very distinct aim: to prepare young people for a business life, but without sacrificing the solid requirements of a complete High School course of study. The course of study as herewith given is equal to the requirements in the better class of English High Schools, and includes a very complete and thorough discipline in stenography, bookkeeping, typewriting and commercial law upon the foundation of a sound English education.

STANDARD AND DIPLOMA.

The Principal of this School will require the most thorough work, and diplomas will be granted only to those who complete the course of study with signal credit. Diplomas will be granted at any time upon the satisfactory completion of the course.

CONDITIONS OF ADMISSION.

For admission to the High School applicants will be required to present a certificate for the full course of an approved grammar school, or pass an examination upon the subjects usually completed within the eight years of the primary and grammar grades, viz: Arithmetic, language, descriptive geography, reading and penmanship. Applicants are requested to bring with them certificates from their last teachers, setting forth what studies the applicants have taken. This certificate should state how much time has been given to each study, the text-book used and the percentage grade received. Blank certificates for the above information will be sent free upon application to the President of the University. In case satisfactory certificates are offered, the applicant will be excused from examination in all subjects except reading, writing, composition and spelling.

UNIVERSITY HIGH SCHOOL.

LATIN COURSE.

Admits to all the University Schools.

Junior High.

English—English Literature; <i>three hours</i>	3
English—English Grammar; <i>four hours</i>	4
English—Composition and Spelling; <i>one hour</i>	1
Mathematics—Arithmetic; <i>three hours</i> . Algebra; <i>two hours</i>	5
Latin—Beginning Latin; <i>five hours</i>	5
Bookkeeping—Elements of Bookkeeping; <i>three hours</i>	3

Middle High.

English—English Literature; <i>three hours</i>	3
English—Composition and Spelling; <i>one hour</i>	1
Mathematics—Algebra; <i>five hours</i> . Plane Geometry; <i>two hours</i>	7
Latin—Miscellaneous Selections, including Cæsar; <i>five hours</i>	5
History—Ancient History; <i>three hours</i>	3
Drawing—Freehand Drawing; <i>two hours</i>	2

Senior High.

English—English Literature; <i>three hours</i>	3
English—Composition and Spelling; <i>one hour</i>	1
Mathematics—Plane Geometry; <i>three hours</i>	3
History—United States History and Civics; <i>five hours</i>	5
Latin—Ovid, Vergil's Bucolics and Mythology; <i>four hours</i>	4
Physics—Elements of Physics, with Laboratory Practice; <i>five hours</i>	5

GERMAN COURSE.

Admits to all University Schools except Liberal Arts and the Latin Normal.

Junior High.

English—English Literature; <i>three hours</i>	3
English—English Grammar; <i>four hours</i>	4
English—Composition and Spelling; <i>one hour</i>	1
Mathematics—Arithmetic; <i>three hours</i> . Algebra; <i>two hours</i>	5
German—First Lessons in German; <i>three hours</i>	3
Science—Natural History; <i>two hours</i>	2
Bookkeeping—Elements of Bookkeeping; <i>three hours</i>	3

Middle High.

English—English Literature; <i>three hours</i>	3
English—Composition and Spelling; <i>one hour</i>	1
Mathematics—Algebra; <i>five hours</i> . Plane Geometry; <i>two hours</i>	7
German—Easy Reading and Conversation; <i>three hours</i>	3
Science—Natural History; <i>two hours</i>	2
History—Ancient History; <i>three hours</i>	3
Drawing—Freehand Drawing; <i>two hours</i>	2

Senior High.

English—English Literature; <i>three hours</i>	3
English—Composition and Word Study; <i>one hour</i>	1
Mathematics—Plane Geometry; <i>three hours</i>	3
History—United States History and Civics; <i>five hours</i>	5
German—Reading and Composition; <i>four hours</i>	4
Physics—Elements of Physics, with Laboratory Practice; <i>five hours</i>	5

UNIVERSITY HIGH SCHOOL.

ENGLISH COURSE.

Admits to all University Schools except Liberal Arts and Latin Normal.

Junior High.

English—English Literature; <i>three hours</i>	3
English—English Grammar; <i>four hours</i>	4
English—Composition and Spelling; <i>one hour</i>	1
Mathematics—Arithmetic; <i>three hours</i> . Algebra; <i>two hours</i>	5
History—Important Epochs of English History; <i>three hours</i>	3
Science—Natural History; <i>two hours</i>	2
Bookkeeping—Elements of Bookkeeping; <i>three hours</i>	3

Middle High.

English—English Literature; <i>three hours</i>	3
English—Composition and Spelling; <i>one hour</i>	1
Mathematics—Algebra; <i>five hours</i> . Plane Geometry; <i>two hours</i>	7
History—Ancient History; <i>three hours</i>	3
Science—Natural History; <i>two hours</i>	2
Drawing—Freehand Drawing; <i>five hours</i>	5

Senior High.

English—English Literature; <i>three hours</i>	3
English—Composition and Word Study; <i>one hour</i>	1
Mathematics—Plane Geometry; <i>three hours</i>	3
Economics—Industrial History and Economics; <i>four hours</i>	4
History—United States History and Civics; <i>five hours</i>	5
Physics—Elements of Physics with laboratory practice; <i>five hours</i>	5

COMMERCIAL COURSE.

Admits to the University School of Commerce.

Junior High.

English—English Literature; <i>three hours</i>	3
English—English Grammar; <i>four hours</i>	4
English—Composition and Spelling; <i>one hour</i>	1
Mathematics—Arithmetic; <i>three hours</i> . Algebra; <i>two hours</i>	5
Bookkeeping—Elements of Bookkeeping; <i>five hours</i>	5
Typewriting—Typewriting; <i>five hours</i>	2

Middle High.

English—English Literature; <i>three hours</i>	3
English—Composition and Spelling; <i>one hour</i>	1
Mathematics—Algebra; <i>five hours</i> . Plane Geometry; <i>two hours</i>	5
Drawing—Freehand Drawing; <i>two hours</i>	2
Stenography—Stenography; <i>five hours</i>	5
Bookkeeping—Bookkeeping; <i>five hours</i>	2

Senior High.

English—English Literature; <i>three hours</i>	3
English—Composition and Spelling; <i>one hour</i>	1
Mathematics—Plane Geometry; <i>three hours</i>	3
Stenography—Stenography; <i>five hours</i>	5
Bookkeeping—Bookkeeping; <i>two periods</i>	2
Law—Commercial Law; <i>two hours</i>	2
History—United States History and Civics; <i>five hours</i>	5

OUTLINE OF HIGH SCHOOL SUBJECTS.

BUSINESS STUDIES.

1. Bookkeeping.

The subject of bookkeeping receives its due attention as a medium of intellectual training, and its value is recognized by placing it in nearly all courses.

The first year's work embraces the work outlined in the Sadler-Rowe Budgets A and B-1, or in an equivalent amount of work in the later publications of the same company. The second year's work embraces B-2 and C 1 and 2, together with the voucher system and miscellaneous exercises in auditing and accounting, corporation bookkeeping, etc. The work is individual in character and each student progresses according to his capability.

The work in the various courses outlined in the University High School and in the Normal School will be arranged according to the time assigned to the subject.

2. Commercial Law.

The course includes the subjects of negotiable paper, sales of personal property, agency, bailments, liens, interest, real estate conveyances, etc. The text is supplemented by lectures on subjects germane to the subject. Text: Parson's Laws of Business.

3. Stenography.

Dement's Pitmanic Shorthand Text is used and is adequate for all classes of stenographic work. The purpose of the course is to ground the student thoroughly in the principles of the art and the instruction is carried through four terms. A good commercial speed is required, but the student will be carried as far as circumstances permit.

4. Typewriting.

This work consists of the exercises given in the Van Sant charts, which follow the touch system. The first part of the work consists of word exercises and this is followed by letter writing, copying legal documents, etc. The department is equipped with three Smith Premiers, two Remingtons, one Century and one Bar Lock, all of the latest models.

LATIN.

1. Latin—Latin lessons, accompanied from an early stage by the reading of simple selections such as found in Collar's New Gradatim. The work of the first year should be devoted to the acquisition of an exact knowledge of forms, and the application of that knowledge in translating from Latin into English and from English into Latin. The vocabularies should be thoroughly mastered. Attention should be given to simple etymologies, especially such as throw light upon the meaning of English words. The Latin should be read with due attention to quantity and accent. *The writing of exercises* from English into Latin should be continued throughout the course, the student continuing to make the corrections as indicated by the teacher until the exercise is made perfect. *Sight Translation* of simple Latin, such as is found in D'Ooge's Colloquia Latina, should accompany the above studies throughout the year. The student should be trained to grasp the meaning of the Latin independently of, and as a preliminary to, the formal rendering into idiomatic English; and should be taught to read the Latin aloud with intelligent expression. The equivalent of one hour per week should be devoted to translation at sight. This work may form a part of each daily recitation, but better results will be obtained by reserving for it an entire recitation period. In place of the preparation usually required, the student should be assigned an exercise for translation from English into Latin.

Texts: Collar and Daniell's First Year Latin; Collar's New Gradatim; D'Ooge's Colloquia Latina. 5 hrs., both semesters, Junior year.

2. Latin—Miscellaneous selections of easy Latin, including selections from Cæsar's Gallic War.

Prose Composition based upon the text.

Latin Grammar—Survey of principles of syntax and peculiarities of word order.

Sight Translation of easy exercises as found in D'Ooge's Easy Latin for Sight Translation. One recitation per week.

Greenough, D'Ooge and Daniell's Second Year Latin; Bennett's Elementary Latin

Grammar; D'Ooge's Easy Latin for Sight Translation, and Latin Composition Sheet. *5 hrs., both semesters, Middle year.*

3. *Latin*—Selections from Ovid, Vergil's Bucolics, Mythology.

Sight Translation continued in D'Ooge's Easy Latin for Sight Translation. Scansion, and reading with expression.

Texts: Kelsey's Selections from Ovid; Harper and Miller's Vergil; Aeneid and Bucolics; Gayley's Classic Myths; D'Ooge's Easy Latin for Sight Translation. *4 hrs., both semesters, Senior year.*

MATHEMATICS.

1. *Arithmetic*—Advance and review work in the leading subjects of Arithmetic. A thorough review of the Metric system of Weights and Measures. Give a variety of problems and exercises in application of the tables. Pupils should know the exact value of each metrical unit and its equivalent in English measure and weight. *3 hrs., both semesters, Junior year.*

2. *Algebra*—Elementary Algebra through equations of the first degree (simple and simultaneous), factoring H. C. F. and L. C. M. Much oral work, especially in factoring. Elementary algebra, fractions, fractional equations, quadratic equations (single and simultaneous) and powers and roots. Increase the amount of demonstration of principles. Introduce liberally purely literal expressions. *2 hrs., both semesters, Junior year; 5 hrs., both semesters, Middle year.*

3. *Geometry*—Plane Geometry, first year. Fifty propositions with abundant exercises to be assigned as a part of every lesson. Much oral work as a training in correct use of language. No algebraic symbolism in this first year of geometry—pure geometry.

Plane Geometry, second year. Seventy-five propositions with exercises assigned as part of each lesson. Algebraic methods may be introduced, but distinction between algebraic and geometrical should not be lost sight of. *2 hrs., both semesters, Middle year; 3 hrs., both semesters, Senior year.*

HISTORY, CIVICS, AND ECONOMICS.

1. *History of England*—A short course dealing with important epochs rather than a continuous narrative of political events. The purpose of the course is to give a general view of the literary, industrial, and constitutional development of the English people. *3 hrs., Junior English year.*

2. *Ancient History*—This course during the first half-year deals with the characteristics of the early Oriental and the primitive American peoples. It is designed to give the student an insight into the origin and development of civilization. The last half-year is devoted to a study of Greek and Roman institutional ideas. Constant reference is made to the work of the previous semester. *3 hrs., Middle year.*

3. *American History and Civics*—A study of the development of the political, economic, religious, social, and educational life in America. The expansion of Europe and especially of England in American explorations, commerce, and settlement will be considered; also the development of English political principles. Civil government will be studied in connection with the history of the development of our institutions. *5 hrs., Senior year.*

4. *Elementary Economics*—After a brief consideration of the great epochs of industrial development in Great Britain and America, this course will be devoted to a discussion of the most fundamental economic problems of the present times. The purpose of the course is to train the student in the observation and interpretation of present-day phenomena and to excite in him a taste for further study of economic and social questions. *4 hrs., Senior English year.*

Note: When special text-books are required, notice will be given at the beginning of the College year. Students are encouraged to own or to have access to a variety of the best and latest authorities. Preparatory students are allowed the use of the University Library, which contains numerous reference works on History and Civics. An attempt is made to render the work in these courses practical by showing the vital connection between the present and the past. Students are trained in the ability to handle historical materials, to form historical judgments, to make comparisons, and to formulate opinions.

ELEMENTS OF PHYSICS.

Physics is insisted upon as the first and fundamental science requirement because it seems best suited for a training in clear thinking and exact expression and for an introduction to the scientific method of reasoning. It is the aim of the course to make the student familiar with the more simple and important laws of Physics, together with a knowledge of the actual working of the law as shown by experiments, and particularly as illustrated in everyday and home life. The laws of no other science give such ready and important assistance in understanding and controlling our constant surroundings, and the student is encouraged to observe and explain the natural phenomena of the sphere in which he lives. Attention is given to illustration by experiments, performed by the students when possible, or at least thoroughly discussed by him; and also to problem work—not merely arithmetical work, but the testing of the ability to apply laws to special cases, and to express relations in equational form. Familiarity with the English and metric units is expected. *5 hrs., both semesters, Senior year.*

BOOKKEEPING.

The elements of Single and Double Entry Bookkeeping are given. *2 hrs., both semesters, Junior year.*

DRAWING.

The elements of Freehand Drawing with abundant practice are given. *2 hrs., both semesters, Middle year.*

HIGH SCHOOL ENGLISH.

Nevada State University Entrance Requirement.

<i>a. Literature.</i>	<i>Junior Year.</i>	
Composition.....		Lockwood and Emerson
The Alhambra.....		Irving
*The Deserted Village.....		Goldsmith
*The Elegy.....		Gray
*Selections from Childe Harold.....		Byron
	(Rome, Greece, Venice, The Coliseum, The Ocean.)	
*The Ancient Mariner.....		Coleridge
Ivanhoe, or The Talisman.....		Scott

Middle Year.

Composition.....		Lockwood and Emerson
Sir Roger de Coverley.....		Addison
*Selections.....		Wordsworth
	(The Ode to Duty, To Milton, The Highland Girl, Laodamia.)	
*The Cloud.....		Shelley
*Horatius.....		Macaulay
The Vision of Sir Launfal.....		Lowell
Silas Marner.....		George Eliot, and
The Vicar of Wakefield.....		Goldsmith, or
The Tale of Two Cities.....		Dickens
The Merchant of Venice.....		Shakespeare

Senior Year.

Composition.....		Lockwood and Emerson
*The Passing of Arthur.....		Tennyson
*The Transcript from Euripides.....		Browning
*Selections.....		Clough
	(Qua Cursum Ventus, Mari Magno, The Lawyer's First Tale.)	
*The Scholar-Gipsy.....		Arnold
*Selections.....		Milton
	(D'Allegro, Il Pensero, On Shakespeare, On His Blindness.)	
Culture and Behavior.....		Emerson
The Reply to Hayne.....		Webster
Julius Caesar.....		Shakespeare

*From Syle's Milton to Tennyson.

b. Grammar—The study of Grammar should be completed and reviewed, if necessary, early in the Junior year. Lockwood and Emerson's Composition contains in Part I a very good review of the subject. In the study of Grammar there should be much and thorough drill in declensions and conjugations, in oral analysis of sentences, and in parsing.

c. Oral Reading and Spelling—There should be constant practice in reading aloud both of prose and poetry. In reading poetry the music of the verse should not be lost sight of; the melody and rhythm of the verse should be felt as emphasizing the thought and as heightening the effect of the piece.

Both reading and spelling are essential qualifications for success in any and all vocations in life. Poor reading and poor spelling should debar the pupil from promotion.

d. Composition—The work in Composition should be based upon a modern text-book, such as Lockwood and Emerson's Composition and Rhetoric (Ginn and Co.). This book correlates the work in Composition with the work in Literature and furnishes material for three years work in Composition. There should be at least one essay a month. This essay, corrected orally in class or by the teacher, should be carefully rewritten by the pupil.

1. In the study of literature in the High School, the primary object is the thorough understanding of the thought and purpose of the writer. To this end the following matters are chiefly to be observed:

- (1) The analysis of the pieces read;
- (2) The description of the characters, both as to motives and outward appearance;
- (3) The explanation of the grammatical and rhetorical questions involved (analysis of sentences, construction of words, figures of speech, prosody, etc.);
- (4) The explanation of the literary, historical, geographical, and mythical allusions;
- (5) Word-study (definition and derivation);
- (6) Observations, suggested by the reading, of men and nature;
- (7) The committing of considerable passages to memory;
- (8) Some knowledge of the life and times of the author.

2. *Texts*: Syle's From Milton to Tennyson (Allyn and Bacon); Lowell's The Vision of Sir Launfal (Riverside Lit. Series); The Arden Shakespeare (D. C. Heath & Co.); Addison's Sir Roger de Coverley (D. C. Heath & Co.); Emerson's Culture and Behavior.

3. *Books for Reference*: Rich's Dictionary of Antiquities; Gayley's Classic Myths (Ginn & Co.); Green's Shorter History of the English People; a good Academic Dictionary.

4. *Oral and Written Expression*: Composition is primarily a matter of drill; the end is the eradication of the pupil's most common faults and the cultivation of easy and correct habits of expression. The essays should be short and frequent. The essentials in composition for pupils of the High School grade are: (1) Arrangement and neatness, spelling and punctuation; (2) the construction of short and, as far as possible, periodic sentences; (3) the correct and clear use of pronouns, and (4) a feeling for the correct position of modifiers. The drill upon these points should be persistent.

The conviction is rapidly gaining ground that responsibility for correct and adequate expression, whether oral or written, must rest not upon the teacher of English alone, but upon the school as a whole, and upon each of its departments; that nearly every school exercise—whether it be *recitation, translation, demonstration, report of experimentation with inference therefrom, or record or statement of any kind*—should be subject to criticism of its form as well as of its contents; that in no other way than this can the habit of correct speech and writing, of vital importance in every department, be really enforced.

Furthermore, it is believed that time and effort so spent will in the end prove no loss to the various branches of study, but rather a gain, through the clearness and grasp of thought which is inseparable from clearness and grasp of expression. In order that the best results in written expression may be secured, it is suggested that each teacher in the school might well devote one recitation period at least every fortnight, in each class, to some sort of written exercise growing out of the subject taught, and this throughout the course.

As to oral expression, the attention of principals and teachers is called to the grave deficiency almost everywhere found, both in speaking and in reading. For the improvement of the former, the consecutive (topical) recitation should be insisted upon as a constant factor in almost every course of instruction; and for both, a clearer, more graceful, and more effective enunciation should be habitually demanded.

THE COLLEGE OF UNIVERSITY EXTENSION.

The Comstock School of Mining and Metallurgy at Virginia City, Nevada.

UNIVERSITY EXTENSION.

1. The University Extension "ideas" is to extend the influence and benefits of University instruction to men and women who have passed beyond the period of their school or college days and yet wish to grow by means of systematic study into a larger knowledge and wisdom and thereby make themselves richer in happiness and usefulness.

THE COMSTOCK SCHOOL.

2. The Comstock School of Mining and Metallurgy was organized at Virginia City, Nevada, on the 1st day of October, 1900, and the courses of instruction in Freehand Drawing and in Chemistry began on October 15th. The special object of this School is to promote technical education among men engaged in mining and reducing ores.

THE SCHOOL YEAR.

3. The school year is continuous for twelve months, but for convenience it is divided into terms of three months each.

SUBJECTS OF INSTRUCTION.

4. Two technical subjects of instruction are given each term with the support of such instruction in general subjects as may be necessary.

CERTIFICATES.

5. Certificates of proficiency will be given at the close of each term to the students who pass in all the subjects of that term. The certificates will set forth in detail the subjects of study and the value in University credits. Each certificate will be signed by the President of the University, the Secretary of the Faculty, and the Instructor in Charge.

DIPLOMAS.

6. Each four certificates, numbered consecutively, will entitle the student holding them to a diploma which shall state the subjects covered and their value in University credits. The diplomas shall be signed by the President of the Board of Regents and by the President of the University.

7. COURSES OFFERED.

Mathematics: Arithmetic, algebra, geometry, trigonometry. Calculus and mechanics may be elected.

Physics: General elementary physics; laboratory physics or well-illustrated lectures; mechanics, heat and electricity.

Chemistry: General chemistry; qualitative and quantitative analysis.

Assaying: Assays of gold and silver ores by scorification and crucible methods. Crushing and preparation of samples.

Drawing: Freehand and mechanical drawing; descriptive geometry and graphic statics.

Surveying: The theory of surveying, established by abundant field and mine practice. Map making.

Geology and Mineralogy: Dynamic, structural, historical and economic geology. Descriptive and determinative mineralogy; petrography and crystallography.

Metallurgy: General metallurgy; metallurgy of gold, silver, copper, lead and zinc.

Engineering: Mining engineering shall include engineering structures, the prospect-

ing, development, drainage and ventilation of mines, blasting, mining machinery, and the application of electricity to the engineering of mines.

DEGREES AND CREDITS.

8. The value of the "credit" is the same in all courses of instruction offered by the University.

9. The credits obtained in the University Extension Schools will be accepted by the University toward any undergraduate degree.

10. The Degree of Mining Engineer will be given to any practical miner who has obtained *one hundred University credits* in the courses of study herein offered and who has received in addition *forty credits* for "a perfect knowledge of the practical work of mining," such as prospecting, opening up a mine, timbering, blasting, ore extraction, etc.

11. The examination in practical mining shall be given by such persons constituting an advisory committee from the honorary members of the Comstock Class as may be appointed by the President of the University.

REMARKS.

12. The Comstock Class has now been organized for a period of fifteen months, and the results go far to demonstrate that miners and others who do hard work from eight to ten hours per day can pursue daily serious studies, such as algebra, geometry, surveying, chemistry and drawing, with sustained interest.

13. The members of the class have paid all the expenses pertaining to room, light, fuel, and to the maintenance of the instructor. The University has paid the salary of the instructor and part of the laboratory equipment.

INSTRUCTORS.

14. The class work was organized and directed for the first year by Mr. J. Henry Dye, C.E., a graduate of the University of Michigan. The present Instructor in Charge is Henry R. Evans, E.M., a graduate of the Colorado School of Mines. Mr. T. J. McCarthy and Mr. W. L. Hayes were assistant instructors during one term.

ENROLLMENT FOR THE YEAR 1901.

GRADUATES.

Abel, James Frederick	Liberal Arts	Toll House
Ayres, Irvin Wilson	Liberal Arts	Oakland, Cal.
Bender, Kate Crocker	Liberal Arts	Reno
Bonham, Fenton Arthur	Liberal Arts	Reno
Davis, Verra Stuart	Liberal Arts	Carson City
Ede, Irene	Liberal Arts	Reno
Hall, Joseph Winchester	Liberal Arts	Eustis, Fla.
Hayes, William Leete	Mines	Pine Grove
Keddie, William Arthur	Mechanical Engineering	Quincy, Cal.
Kornmayer, Frank J.	Mines	Reno
Kruger, Tillie Naomi	Liberal Arts	Taylorville, Cal.
Maxwell, Agnes Jean	Liberal Arts	Reno
Mayer, Charles Gay	Mines	Elko
Moran, William Joseph	Mines	Virginia City
Nash, Maude Emma	Liberal Arts	Reno
Richard, Leroy Levine	Mines	Carson City
Sadler, Alfred Reinholt	Mines	Carson City
Saxton, George Thair*	Mines	Carson City
Schadler, August Henry	Mechanical Engineering	Reno
Sparks, Ethel Vinita	Liberal Arts	American Falls, Idaho
Stubbs, Donald Patterson	Civil Engineering	San Francisco, Cal.
Stubbs, Ralph Sprengle	General Science	Reno
Taylor, William Leslie	Mines	Silver City
Tobin, Richard Charles*	Mines	Virginia City
Ward, David	Liberal Arts	Reno

SENIORS.

Allen, Alice Leona	Liberal Arts	Silver City
Anderson, Geo. E.	Mines	Beckwith, Cal.
Arnot, Edwin Percy	Mines	Markleeville, Cal.
Bray, Jno. Carlton	Mines	Reno
Cameron, Jno. Donald	Mechanical Engineering	Virginia City
Case, Seymour	Mechanical Engineering	Paradise Valley
Evans, M. Elizabeth	Liberal Arts	Reno
Giles, James Sweeney	Liberal Arts	Houston, Texas
Grey, Blaine	General Science	Carson City
Hall, Florence R.	Liberal Arts	Carson City
Hunter, Wm. Webber	Mines	Virginia City
Jameson, Harry	General Science	Reno
Leadbetter, Benj. Cleveland	Mines	Reno
Mack, Joseph Page	Mechanical Engineering	Dayton
Mayhugh, Jno. S., Jr.	Civil Engineering	Elko
McCormack, Elizabeth	Liberal Arts	Reno
Orr, Laura B.	Liberal Arts	Reno
Quinn, Patrick J.	Mines	Virginia City
Southworth, Chas. Ernest	Mines	Genoa
Southworth, Harford Clay	Mines	Genoa
Springmeyer, Geo. W.	General Science	Gardnerville
Webster, Florence Elizabeth	Liberal Arts	Reno
Young, Marion Ethel	Liberal Arts	Greenville, Cal.

*Work incomplete; Diploma withheld.

JUNIORS.

Allen, Carrie Henrietta	Liberal Arts	Silver City
Arms, Mira	Liberal Arts	Vinton, Cal.
Barker, Frank E.	Liberal Arts	Carson City
Bradshaw, Marcus Givens	Mines	Reno
Brumsey, Jessie May	Liberal Arts	Carson City
Doten, Goodwin Stoddard	Liberal Arts	Reno
Drew, Wm. F.	Mechanical Engineering	Candelaria
Erickson, Edward John	Mines	Eureka
Esden, Lillian Estelle	Liberal Arts	Wadsworth
Hayes, Madrice Pease	Mines	Bridgeport, Cal.
Hesson, Robert Winfield	Mines	Elko
Johnson, Anna Sophia	Liberal Arts	Eureka
Kelley, Arthur Lean	Mines	Crescent, Cal.
Kent, Florence Virginia	Liberal Arts	Stillwater
Levy, Della	Liberal Arts	Reno
Luke, Frank H.	Mines	Reno
McElroy, John Owen	General Science	Sattley, Cal.
McVicar, James G.	Mines	Smith
Peckham, James G.	Mines	Reno
Richardson, Mabel	Liberal Arts	Reno
Smith, Brainerd	Mines	Reno
Snapp, Pearl Evelyn	Liberal Arts	Rebel Creek
Stewart, Elbert Alfred	Mines	Reno
Taylor, Alfred Theodore	Liberal Arts	Susanville, Cal.
Weathers, Olive Eleanor	Liberal Arts	Deeth
Whittaker, Fred	Mines	Leadville, Colo.
Wilson, Hicksey May	Liberal Arts	Reno
Wolf, Wm. Albert	Mines	Winnemucca

SOPHOMORES.

Acree, Dudley Burchim	Mines	Austin
Bailey, Laura Gertrude	Liberal Arts	White
Blakeslee, Mabel Hayward	Liberal Arts	Reno
Buchanan, Virgil	Liberal Arts	Beckwith, Cal.
Cameron, Jeannette Eveline	Liberal Arts	Virginia City
Case, Jno. S.	Civil Engineering	Paradise Valley
Catlin, Wm. Prince	Mines	Carson City
Caton, Albert J.	Liberal Arts	Gold Hill
Comerford, James Vincent	Liberal Arts	Virginia City
Delonchaint, Fred Joseph	Mines	Reno
Gibson, Agnes Pearl	Liberal Arts	Reno
Graham, Frank Warner	Mines	Reno
Julien, Ralph W.	Mines	Reno
Kearney, Wm. M.	Mines	Empire
Kelley, Mark M.	Civil Engineering	Crescent, Cal.
Leadbetter, Percy C.	Mechanical Engineering	Reno
Leavitt, Edgar I.	General Science	Yerington
Lyman, Edward Dean	Liberal Arts	Reno
Lyman, George Dunlap	Liberal Arts	Reno
Nathan, Fred August	Mechanical Engineering	Reno
O'Hara, Bernard Francis	Mines	Virginia City
Plumb, Mabel Grant	General Science	Tuscarora
Price, J. Henry	Mines	Virginia City
Rammelkamp, Elizabeth	Liberal Arts	Dayton
Smith, Frank T.	Mines	Genoa
Thompson, Frank P.	Mechanical Engineering	Pioche
Thompson, Wm. B.	Mechanical Engineering	Reno

Unsworth, Samuel Seabury	Mines	Reno
Weddle, Walter E.	Mines	Dinuba, Cal.
Weller, Frank A. E.	Mechanical Engineering	Austin
Wright, Nat D.	Mechanical Engineering	Reno

FRESHMEN.

Arms, Mary Emeline	Normal	Vinton, Cal.
Arnot, Laura	Liberal Arts	Markleeville, Cal.
Bacon, Mary	Liberal Arts	Reno
Berry, Emily	Normal	Sattley, Cal.
Brannin, Lucy Rebecca	Liberal Arts	Wadsworth
Bridges, Chas. Henry	General Science	Wadsworth
Bull, Chas. Edward	Liberal Arts	Big Valley, Texas
Bulmer, Halbert Boswell	Mines	Virginia City
Cahill, Alice Agnes	Normal	Reno
Chase, Sarah Olive	Normal	Glendale
Chism, Harry Cyrus	Mines	Reno
Clark, Benjamin	General Science	Reno
Clough, Leon Lowell	Liberal Arts	Quincy, Cal.
Conway, Robert James	Mines	Wells
Cooke, Mary Elizabeth	Liberal Arts	Dayton
Cox, Chas. LeRoy	Mines	Reno
Damm, Anna Caroline	Normal	Lovelock
Day, Lena I.	Normal	Wadsworth
Ede, Allen Samuel	Mines	Reno
Edsen, Clarence Herbert	Mines	Wadsworth
Fay, Lillian Nevada	Liberal Arts	Sheridan
Finck, Adolphine Bertha	Normal	Wells
FitzGerald, Josephine Louise	Liberal Arts	Virginia City
Fuller, Della Alberta	Normal	Fort Bragg, Cal.
Guthrie, Grace Malvina	Normal	Winnemucca
Hamlin, Eunice Edna	Normal	Sierraville, Cal.
Hamlin, Helen Hale	Normal	Sierraville, Cal.
Hand, Catherine	Liberal Arts	Delamar
Heizer, Otto F.	Mines	Reno
Henderson, Albert S.	Liberal Arts	Eureka
Hershiser, Beulah	Liberal Arts	Reno
Hibbard, Geraldine Conger	General Science	Reno
Kenney, Everett L.	Mines	Virginia City
Kerby, Annette	Normal	Reno
Lawrence, Wm. C.	Mechanical Engineering	Greenville, Cal.
Louderback, Harold	Liberal Arts	San Francisco, Cal.
McClaskey, Frank	General Science	Carson City
Maxson, Herbert	Civil Engineering	Reno
Maxwell, Alice H.	Liberal Arts	Reno
Meder, Frank Eastman	Mines	Carson City
Murray, Mabel Adelaide	Liberal Arts	Wadsworth
Nesbitt, James	Mines	Delamar
North, Angelina Virginia	Liberal Arts	Reno
O'Hara, Philip John	Liberal Arts	Virginia City
O'Neill, Wm. James	Mechanical Engineering	Reno
Orr, Wm. Edwin	Mines	Pioche
Osborne, Chas. D.	Mines	Pioche
Palmer, Walter E. S.	Mines	Reno
Patterson, James Druellard	Mechanical Engineering	Reno
Pearson, Will	Mines	Virginia City
Pepper, Lizzie Emma	Liberal Arts	Eureka
Pike, Leroy	Civil Engineering	Reno

Pope, Wm. Joseph	Mechanical Engineering	Virginia City
Pugh, Doris	Normal	Yerington
Rammelkamp, Georgia A.	Liberal Arts	Dayton
Riordan, Andrew	Liberal Arts	White River
Roberts, Edward J.	Mines	Delamar
Ruddell, Alice	Liberal Arts	Lovelock
Sadler, Hermann J.	Commerce	San Francisco, Cal.
Sheehy, Gertrude	Liberal Arts	Virginia City
Shier, Anna Ella	Normal	Delamar
Shier, Edgar	Mines	Delamar
Shirley, Maude W.	Normal	Bishop, Cal.
Smith, Bertha	Normal	Buffalo Meadows
Smith, Cassius	Mechanical Engineering	Reno
Snapp, Mabel	Liberal Arts	Rebel Creek
Souchereau, Obeline Lydia	Liberal Arts	Verdi
Spellier, Louis A.	Mechanical Engineering	Taylorville, Cal.
Standerwick, Harry Maxwell	Liberal Arts	Battle Mountain
Stark, Chas. Wm.	Mines	Tuscarora
Taylor, Louise	Normal	Silver City
Thrall, Wm. Parsons	Mines	Wadsworth
Warren, Maude	Normal	Wabuska
West, Geo. Franklin	Mines	Yerington
Wickland, Allan Martin	Liberal Arts	Wadsworth
Wilkerson, Harry T.	Mechanical Engineering	Sheridan
Williams, John Bernard	Mechanical Engineering	Gold Hill
Wilson, Ernest Everett	General Science	Bishop, Cal.
Wise, Ollie Nevada	Liberal Arts	Battle Mountain
Woodward, Anna B.	Liberal Arts	Jack Creek
Worthing, Leigh Ernest	General Science	Traver, Cal.
Wright, Jno.	Commerce	Reno

NEVADA STATE NORMAL SCHOOL.

GRADUATES.

Arms, Mira	Vinton, Cal	Lawrence, Laura	Greenville, Cal.
Banta, Helen	Reno	Lodge, Lillian	Reno
Banta, Louise	Reno	Pettinger, Minnie	Virginia City
Beck, Alice Mabel	Virginia City	Pitt, Ada	Lovelock
Henry, Margaret	Reno	Wilson, May	Reno

SENIORS.

Benson, Mary Lea	Reno	O'Leary, Aloysia	Virginia City
Bradshaw, Minnie May	Paradise Valley	Peckham, Hattie	Reno
Buchanan, Bessie Sarah	Wadsworth	Roberti, Zena	Willow Creek
Erickson, Regina Ione	Eureka	Sanger, Elizabeth	Carson City
Hall, Mrs. Jennie G.	Reno	Scott, Mary McKee	Ely
Harley, Lillian Martha	Virginia City	Smith, Loria	Buffalo Meadows
Hill, Dora B.	Verdi	Sweeney, Louise Janette	Carson City
McCormick, Clara Mae	Reno	Treglone, Elizabeth Maud	Virginia City
McDermott, Lucy	Virginia City	Weeks, Harriet	Wells
McMullen, Mattie	Deeth	Wright, Elizabeth	Reno
Meginness Luella	Candelaria		

FRESHMEN.

Arms, Mary Emeline	Vinton, Cal.	Hamlin, Eunice Edna	Sierraville, Cal.
Berry, Emily	Sattley, Cal.	Hamlin, Helen Hale	Sierraville, Cal.
Cahill, Alice Agnes	Reno	Kerby, Annette	Reno
Chase, Sarah Olive	Glendale	Pugh, Doris	Yerington
Damm, Anna Caroline	Lovelock	Shier, Anna Ella	Delamar
Day, Lena I.	Wadsworth	Shirley, Maude W.	Bishop, Cal.
Finck, Adolphine Bertha	Wells	Smith, Bertha	Buffalo Meadows
Fuller, Della Alberta	Fort Bragg, Cal.	Taylor, Louise	Silver City
Guthrie, Grace Malvina	Winnemucca	Warren, Maud	Wabuska

FIRST YEAR.

Conaway, Marguerite A.	Meadow Valley	Nelson, Jennie	Tuolumne City, Cal.
Elliott, Eloise Elizabeth	Bridgeport, Cal.	Regli, Emma C.	Eureka
Goble, Alma	Wells	Tanner, Florence Anna	Wells
McMullen, Rose	Deeth	Walker, Lily Anna	Safford
Meyers, Annie V.	Kettle, Cal.		

UNIVERSITY HIGH SCHOOL.

SENIOR HIGH.

Becker, Lulu	Commercial	Reno
Black, Wm. Clair	Commercial	Deeth
Blevens, Dollie Adeline	Latin	Peko
Blum, Jno. Wm.	Scientific	Reno
Bradley, F. Dean	Scientific	Palisade
Cazier, Henry Halowell	Scientific	Wells
Cazier, Helen Elizabeth	Latin	Wells
Conaway, Marguerite A.	Normal	Meadow Valley
Cox, Grace Emma	Commercial	Reno
Elliott, Eloise Elizabeth	Latin	Bridgeport, Cal.
Elliott, Leslie Edwin	Scientific	Bridgeport, Cal.
Fallon, Wm. F.	Scientific	Virginia City
Ganser, Gertrude	Commercial	Battle Mountain
Goble, Alma	Normal	Wells
Graham, Mabel Clara	Latin	Reno
Hobart, Maud Alice	Latin	Virginia City
Hofmann, Gustav E.	Scientific	Reno
Hogan, Joseph Cyril	Scientific	Reno
Kerby, Eugene	Scientific	Reno
Mack, Irene Myrtle	Latin	Virginia City
Mihills, Villa	Latin	Reno
Molini, Emmanuel	Commercial	Candelaria
Monks, Tony Joseph	Scientific	Deeth
McGowan, Kate	Latin	Yerington
McMullen, Lulu Belle	Normal	Deeth
McMullen, Rose	Normal	Deeth
Meyers, Annie V.	Normal	Kettle, Cal.
Nelson, Jennie	Latin	Tuolumne City, Cal.
Nugent, Frances	Latin	Virginia City
Peckham, Alfred Rufus	Scientific	Reno
Rainwater, Ada	Commercial	Reno
Regli, Emma C.	Normal	Eureka
Scott, Joe Dusang	Commercial	Battle Mountain

Shier, Laura	Normal	Delamar
Smiley, John Albert	Scientific	Deeth
Stevens, Gladys	Latin	Tonopah
St. Clair, Arthur Leo	Scientific	Deeth
Tanner, Florence Anna	Normal	Wells
Taylor, Chester Carlton	Scientific	Silver City
Taylor, Jobe T.	Latin	Reno
Updike, Daniel Halliday	Scientific	Reno
Walker, Lily Anna	Normal	Safford
Weathers, Leland Stanford	Scientific	Deeth

MIDDLE HIGH.

Baber, Wm. Owen	Commercial	McDermitt
Banta, Rose	Latin	Reno
Boyd, Wm. T.	Commercial	Reno
Bradshaw, Belle	Commercial	Paradise Valley
Bryant, Louis P.	Commercial	Wadsworth
Burke, Frances Lyle	Latin	Carson City
Carey, Agnes	Latin	Virginia City
Chism, Edward	Scientific	Reno
Clark, Inez Lillian	Commercial	Reno
Clancey, Bea	Latin	Beowawe
Coll, Grace Edna	Latin	Tuscarora
Culverwell, Chas.	Commercial	Meadow Valley
Drake, Frank	Scientific	Tuscarora
Frazer, Clair Vernon	Scientific	Wedekind
Gesner, Jessie Frances	Latin	Reno
Hogan, Dora	Latin	Reno
Holmes, Phemie	Commercial	Reno
Hose, Orville Franklin	Scientific	Reno
Humphrey, Muzette	Latin	Reno
Hunewill, Lucile Eva	Latin	Bridgeport, Cal.
Knemeyer, Bertha	Normal	Mason Valley
Ladd, Lydia	Commercial	Lovelock
Lawson, Edna	Commercial	Gold Hill
Lobner, Ruth	Commercial	Reno
Mayer, Stuart C.	Scientific	Elko
McIntyre, Sarah	Commercial	Battle Mountain
Miller, Millie	Commercial	Reno
Nesbitt, George	Commercial	Delamar
O'Leary, Francis Robert	Latin	Lewis
Palmer, George Edwin	Commercial	Reno
Peterson, Frank	Commercial	Carson City
Sadler, Bertha	Commercial	Carson City
Skinner, Clarence LeRoy	Commercial	Reno
Sparks, Chas. M.	Latin	Reno
Sparks, Paul Milligan	Scientific	American Falls, Idaho
Tomamichel, Theodore	Commercial	Reno
Walts, Herbert	Commercial	Reno
Wiseman, Lloyd Crittenden	Commercial	Wells

JUNIOR HIGH.

Avery, Jessie	Commercial	Reno
Branton, Sadie	Latin	Reno
Burge, Edith Anne	Commercial	Paradise Valley
Conaway, Joseph Albert	Commercial	Meadow Valley
Cowin, Benjamin T.	Commercial	Benton, Cal.
Davidovich, Milan	Commercial	Soda Springs
Dugan, Chas.	Commercial	Laws, Cal.

Frazer, Myrtle	Latin	Wedgekind
Gruss, Roland	Scientific	San Francisco, Cal.
Hart, James	Scientific	Reno
Hunsinger, Jessie	Commercial	Susanville, Cal.
Murray, Elizabeth	Latin	Reno
Nelson, Chas. Wm.	Commercial	Lovelock
Peck, Bertha	Latin	Mountain City
Pugh, Harriet Holmes	Latin	Yerington
Raine, J. P.	Commercial	Palisade
Spalding, Blanche	Commercial	Susanville, Cal.
Westfall, Vernon Andrew	Commercial	Lovelock
Whisler, Elmer	Commercial	Glendale
Wilkinson, Geo. N.	Commercial	Reno
Williams, Abbie C.	Commercial	Fallons
Williams, Ada Bernice	Commercial	Fallons
Williams, Thos.	Commercial	Laws, Cal.

SPECIAL STUDENTS.

Beckwith, Callie May	Stenography	Sierra City, Cal.
Black, Fred D.	Mines	Virginia City
Bonham, Clyde	Physiology	Reno
Boyd, Delle	Stenography	Reno
Bray, Mrs. J. E.	English	Reno
Burnett, Margaret	Typewriting	Reno
Delonchant, Georgina	Domestic Arts	Reno
Dolan, J. P.	Mines	Bodie, Cal.
Drips, J. H.	Drawing	Reno
Dron, Alexander Ruthford	Commercial	Austin
Fiene, Mary	Stenography	Reno
Fitzmaurice, Chas. Ruchard	Mines	Rossland, B. C.
Gault, C. J.	Stenography	Reno
Harrington, Walter Bert	Mines	Virginia City
Hayes, Wm. Leete	Metallurgy	Pine Grove
Holmes, J. A.	Chemistry	Bridgeport, Cal.
Howk, J. S.	Chemistry	Reno
Jameson, Curry	Mechanics	Reno
Keddie, Wm. Arthur	Bookkeeping	Quincy, Cal.
Kistler, Minnie Amanda	Normal	Cedarville, Cal.
Lamb, Harry Fred	Stenography	Reno
Lester, Kate M.	French	Canby, Cal.
Liles, Alice	German	Collins, O.
Lothrop, Daisy	English	Dayton
Lundy, C. A.	English	Bodie, Cal.
Mayer, Chas. G.	Metallurgy	Elko
McBride, Lucile	Domestic Arts	Reno
McClintock, Saxe Milton	Mines	Burton, Wash.
Moffitt, Elizabeth E.	Drawing	Vinton, Cal.
Moorman, Paul Samuel	Mines	Reno
Newmarker, Lillian A.	Stenography	Reno
O'Sullivan, Mrs. J. B.	Domestic Arts	Reno
Palmer, Harry Stanley	Mechanics	Reno
Paris, Hattie	English	Reno
Patterson, Maud	Domestic Arts	Reno
Pavola, Alma	Stenography	Reno

Phelps, Joseph	Mines	Reno
Pike, Cleve	Stenography	Reno
Pollard, Mary	Spanish	Reno
Pursel, Bertha	Normal	Mason Valley
Pursel, Eleanor	Normal	Mason Valley
Ross, Ellabelle	Mathematics	Virginia City
Saxton, Ernest	Mines	Carson City
Schoer, Claude Philipp	English	Wells
Sessions, Ivan Etelka	Hygiene	Reno
Sunderland, Anna	Domestic Arts	Reno
Sunderland, Beatrice	Latin	Reno
Sunderland, Mabel	Domestic Arts	Reno
Willey, Lola	Bookkeeping	Wadsworth
Williams, Mrs. Harriet	Stenography	Reno
Williams, Mrs. L. A.	Stenography	Carson City
Woodward, Chester A.	English	Jack Creek
Wrinkle, Geo. Scott	Mines	Citrus, Cal.

THE COLLEGE OF UNIVERSITY EXTENSION.

SCHOOL OF MINES AT VIRGINIA CITY, NEVADA.

Students Enrolled October 1, 1900, and in the School January 1, 1902.

Name.	Occupation.	Residence.
Borlini, Alfred A.	Miner	Virginia City
Canavan, Andrew	Miner	Gold Hill
Carew, John J.	Miner	Virginia City
James, John Henry	Miner	Virginia City
McCarthy, T. J.	Clerk	Virginia City
McDonell, Duncan A.	Miner	Virginia City
Stoddart, J. H.	Miner	Virginia City
Young, John	Miner	Virginia City
Zabel, Henry E.	Miner	Virginia City

Students Enrolled October 1, 1900.

Name.	Occupation.	Continuance.	Residence.
Allyn, Geo. S.	Miner	9 months	Virginia City
Amber, Oscar F.	Miner	2 months	Virginia City
Averill, M. R.	Teacher	10½ months	Virginia City
Bowie, Jno.	Prospector	9 months	Virginia City
Bulmer, H. B.	Student	9 months	Virginia City
Burns, W. A.	Miner	2 months	Virginia City
Cahalan, Michael J.	Clerk	2 weeks	Virginia City
Cameron, Jno. D.	Miner	3 months	Virginia City
Cavanaugh, B.	Clerk	13 months	Virginia City
Colburn, C. H.	Prospector	5 months	Virginia City
Davis, J. M.	Merchant	3 months	Virginia City
Dewar, J. C.	Printer	2 weeks	Virginia City
Dunn, Wm.	Engineer	3 months	Virginia City
Fallon, F. S.	Miner	1 month	Virginia City
Greenfield, G. H.	Minister	6 months	Virginia City
Haas, B. G.	Clerk	6 months	Virginia City
Harris, E. B.	Student	1 month	Virginia City
Heinsch, R. C.	Wells-Fargo Agent	7 months	Virginia City
Nulty, Jas. L.	Yardmaster	2 months	Virginia City
O'Toole, Jno. O.	Miner	1 month	Virginia City

NEVADA STATE UNIVERSITY.

Phipps, Albert S.	Miner	3 months	Virginia City
Pinaglia, Lawrence	Miner	3 months	Virginia City
Ross, G. C.	Teacher	2½ months	Virginia City
Spaulding, Clarence S.	Prospector	12 months	Virginia City
Steel, O. C.	Miner	1 month	Virginia City

Students Enrolled January 1, 1902.

Name.	Occupation.	Residence.
Bravin, Bert	Bookkeeper	Virginia City
Carey, Thos.	Miner	Virginia City
Cobb, Geo.	Millman	Virginia City
Conway, Jas. H.	Student	Gold Hill
Drysdale, Geo. H.	Miner	Virginia City
Fallon, W. F.	Clerk	Virginia City
Gibson, R. Y.	Supt. Davis Drill	Virginia City
Gregory, J. F.	Teacher	Dayton
Hafferan, Jos. J.	Assayer	Virginia City
Hunter, H. S.	Miner	Virginia City
Kernan, Jos. J.	Miner	Virginia City
Kitson, Jno. W.	Miner	Virginia City
Lichtenberg, E.	Electrician	Virginia City
Mahoney, Jas.	Miner	Virginia City
Neligh, Clarence	Clerk	Virginia City
Ninnis, Fred C.	Miner	Silver City
Reed, R. D.	Miner	Virginia City
Richards, John W.	Electrician	Virginia City
Rodgers, W. M.	Watchman	Virginia City
Ross, Jno.	Student	Virginia City
Royer, Reese B.	Mill Foreman	Silver City
Sexsmith, J. W.	Clerk	Virginia City
Sullivan, Daniel R.	Miner	Virginia City
Sullivan, Thos.	Electrician	Virginia City
Worn, Geo. R.	Foreman	Virginia City

NEVADA STATE UNIVERSITY.

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SUMMARY OF ENROLLMENT OF STUDENTS.

School of Liberal Arts—

Graduates	12
Seniors	7
Juniors	15
Sophomores	10
Freshmen	27
	71

School of Mines—

Graduates	9
Seniors	8
Juniors	12
Sophomores	11
Freshmen	20
	60

School of General Science—

Graduates	1
Seniors	3
Juniors	1
Sophomores	2
Freshmen	5
	12

School of Mechanical Engineering—

Graduates	2
Seniors	3
Juniors	1
Sophomores	6
Freshmen	8
	20

School of Civil Engineering—

Graduates	1
Seniors	1
Juniors	0
Sophomores	2
Freshmen	2
	6

School of Commerce—

Graduates	0
Seniors	0
Juniors	0
Sophomores	0
Freshmen	2
	2

Normal School—

Graduates	10
Seniors	21
Freshmen	18
	49

Total University Schools..... 220

UNIVERSITY HIGH SCHOOL.

First Year Normal	9
Senior High	42
Middle High	38
Junior High	23
	112

Special Students..... 53

SCHOOL OF UNIVERSITY EXTENSION AT VIRGINIA CITY.

Senior students	9
Middle students	25
First year students	25
	59

Grand total..... 444
Deducting 30 names counted twice..... 30

Net total for year 1901..... 414

Enrollment of young men..... 231
Enrollment of young women..... 188

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